SITE SS-005
NON-DESTRUCTIVE INSPECTION FACILITY SOIL OPERABLE UNIT

RECORD OF DECISION

Plattsburgh Air Force Base Installation Restoration Program

prepared for:

United States Department of The Air Force
Plattsburgh Air Force Base
Plattsburgh, New York

Final
March 1998

G1953A

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PLATTSBURGH AIR FORCE BASE
PLATTSBURGH, NEW YORK

FINAL

MARCH 1998

UNITED STATES DEPARTMENT OF THE AIR FORCE
INSTALLATION RESTORATION PROGRAM

Prepared By:

URS GREINER, INC.

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DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

Plattsburgh Air Force Base (AFB)
Site SS-005 Non-Destructive Inspection Facility
Plattsburgh, New York

STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) presents a selected remedial action for soil at site SS-005 on Plattsburgh Air Force Base (AFB) in Plattsburgh, New York. It has been developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site, a copy of which is located at the Information Repository at the Feinburg Library on the campus of the State University of New York at Plattsburgh.

The remedy has been selected by the United States Air Force (USAF) in conjunction with the United States Environmental Protection Agency (USEPA) and with the concurrence of the New York State Department of Environmental Conservation (NYSDEC) pursuant to the Federal Facilities Agreement among the parties under Section 117(a) of CERCLA, dated September 12, 1991.

ASSESSMENT OF THE SITE

Contaminants in the soil at SS-005 present as a result of surface spills, potential tank leaks, and runoff from the waste accumulation area currently pose no significant threats to human or ecological health under current and planned future non-residential land use scenarios. Principle future threats at Site SS-005 include a potential for groundwater contaminant concentrations to increase beneath the site as a result of the upgradient FT-002 groundwater contaminant plume and an unevaluated potential risk from surface soil that could be present for land uses other than the current and planned future non-residential use. These principle threats are addressed by the preferred alternative presented in this ROD.

DESCRIPTION OF THE REMEDY

This action addresses the principal threats posed at SS-005 by preventing endangerment to human health and the environment, through institutional controls that limit the use of the site to non-residential land use and that prohibit the installation of any wells for drinking water or any other purposes that may result in the use of the underlying groundwater. Institutional controls will be implemented through lease and deed restrictions. An evaluation of the institutional controls will be undertaken during reviews of the remedy, to be undertaken between the USAF, USEPA, and NYSDEC every five years following ROD execution.

The results of the soil and groundwater sampling indicate that the soils at SS-005 are not a source of groundwater contamination. Therefore, groundwater monitoring is not included in the USAF's recommended alternative. Rather, groundwater remedial actions, including monitoring, will be specified in the preferred alternative for the Fire Training Area (FT-002)/Industrial Area Groundwater Operable Unit (FTA/IA GOU).

STATUTORY DETERMINATIONS

The selected remedy for the SS-005 Soil Operable Unit is protective of human health and the environment, complies with federal and state Applicable or Relevant and Appropriate Requirements, and is cost-effective. Treatment of the soil is considered impractical as risks to human health and the environment are within acceptable levels under the current and planned future land use scenarios. Consequently, the remedy does not satisfy the statutory preference for treatment as a principle element of remediation.

Because this remedy will result in hazardous substances remaining on site, the USAF, USEPA, and NYSDEC will conduct site reviews every five years to ensure that the institutional control remedy continues to provide adequate protection of human health and the environment.

Signature (USEPA, Regional Administrator) — Date: 4/2/98

Signature — RODNEY A. COLEMAN
Office of the Assistant Secretary
(Manpower, Reserve Affairs, Installations
& Environment) — Date: 31 MARCH 1998

STATUTORY DETERMINATIONS

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Signature (USEPA, Regional Administrator) — Date

Signature — RODNEY A. COLEMAN
Office of the Assistant Secretary
(Manpower, Reserve Affairs, Installations
& Environment)

31 MARCH 1998
Date

1.0 SITE NAME, LOCATION, AND DESCRIPTION

Plattsburgh AFB, located in Clinton County in northeastern New York State, is bordered on the north by the City of Plattsburgh and the Saranac River, on the west by Interstate 87, on the south by the Salmon river, and on the east by Lake Champlain. It lies approximately 26 miles south of the Canadian border and 167 miles north of Albany, New York (Figure 1). Plattsburgh AFB was closed on September 30, 1995 as part of the (third round of) base closures mandated under the Defense Base Closure and Realignment Act (DBCRA commonly referred to as BRAC) of 1990, and its reuse is being administered by the Plattsburgh Airbase Redevelopment Corporation (PARC). According to land use plans presented in the Environmental Impact Statement (Tetra Tech 1995) for disposal and reuse of the base, the likely reuse at SS-005 and its surrounding area will be aviation support (industrial).

As part of the USAF's IRP and the BRAC program, Plattsburgh AFB has initiated activities to identify, evaluate, and restore identified hazardous waste sites. The IRP at Plattsburgh AFB is being implemented according to a Federal Facilities Agreement Docket No. II-CERCLA-FFA-10201, signed between the USAF, USEPA and NYSDEC on September 12, 1991. Plattsburgh AFB was placed on the National Priorities List (NPL) on November 21, 1989.

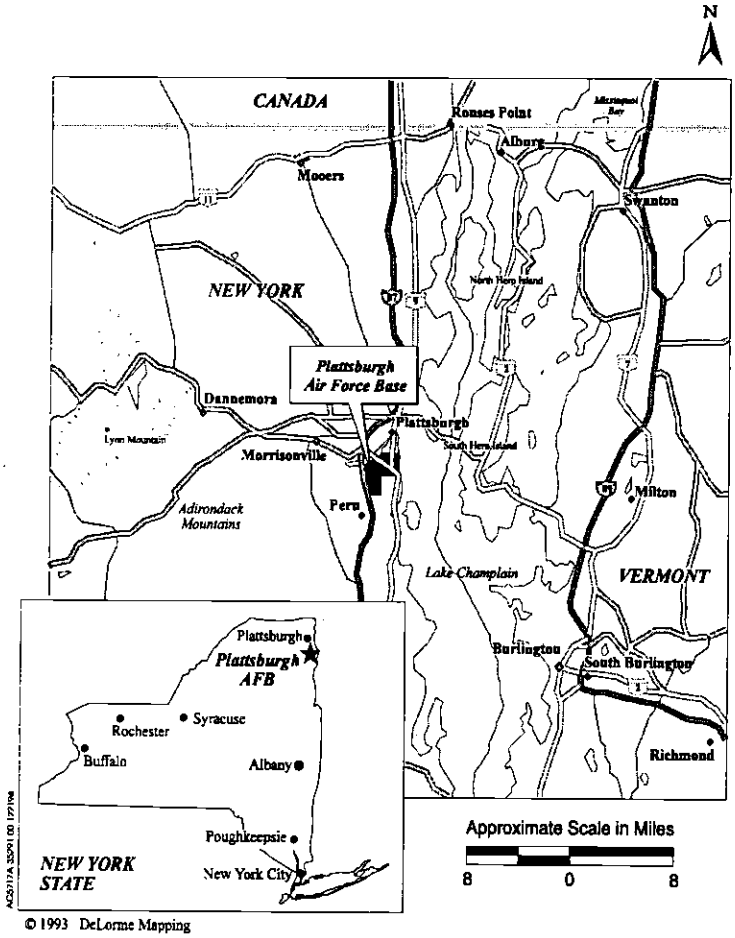


FIGURE 1: VICINITY LOCATION MAP

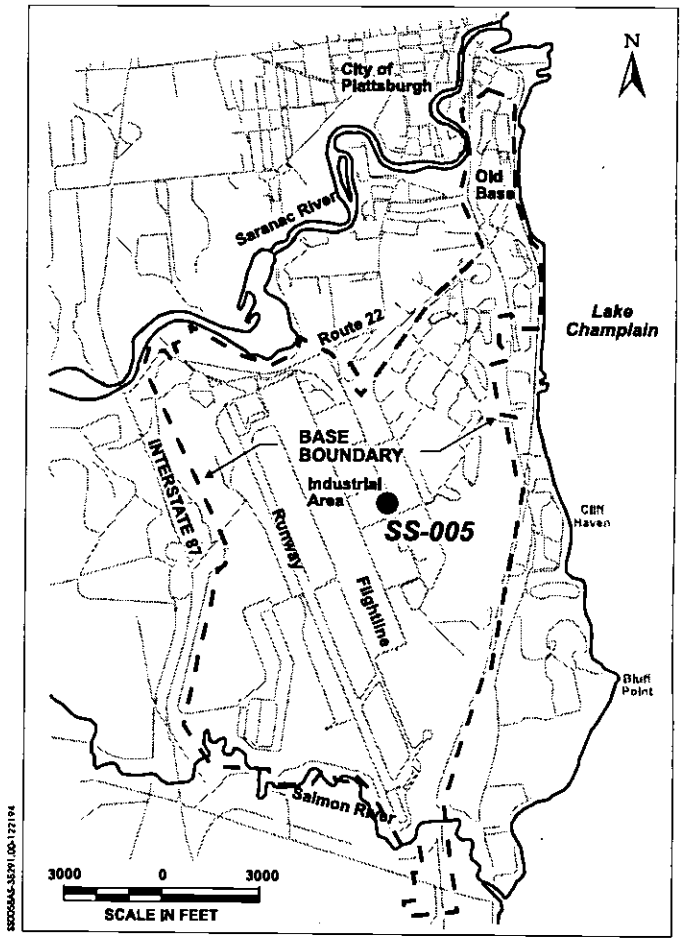


FIGURE 2: LOCATION OF SS-005

The Non-Destructive Inspection (NDI) Facility is located in the east-central portion of the base, within the industrial area (Figure 2). The site is situated approximately 160 feet northeast of Nose Dock 4 and 160 feet north-northwest of an aboveground reservoir (Figure 3). The U-shaped NDI building is surrounded by asphalt pavement. The facility was used for the non-destructive x-ray inspection of aircraft parts. A waste accumulation area formerly was located at SS-005.

The accumulation point handled approximately 120 gallons of waste and 200 gallons of photographic developer solution per year. Materials used and stored at this facility included PD-680 cleaning solvent, engine oil, 1,1,1-trichloroethane, developer, dye penetrant fluid, remover, and photographic fixer solution. The fixer solution was treated by a silver recovery unit before disposal.

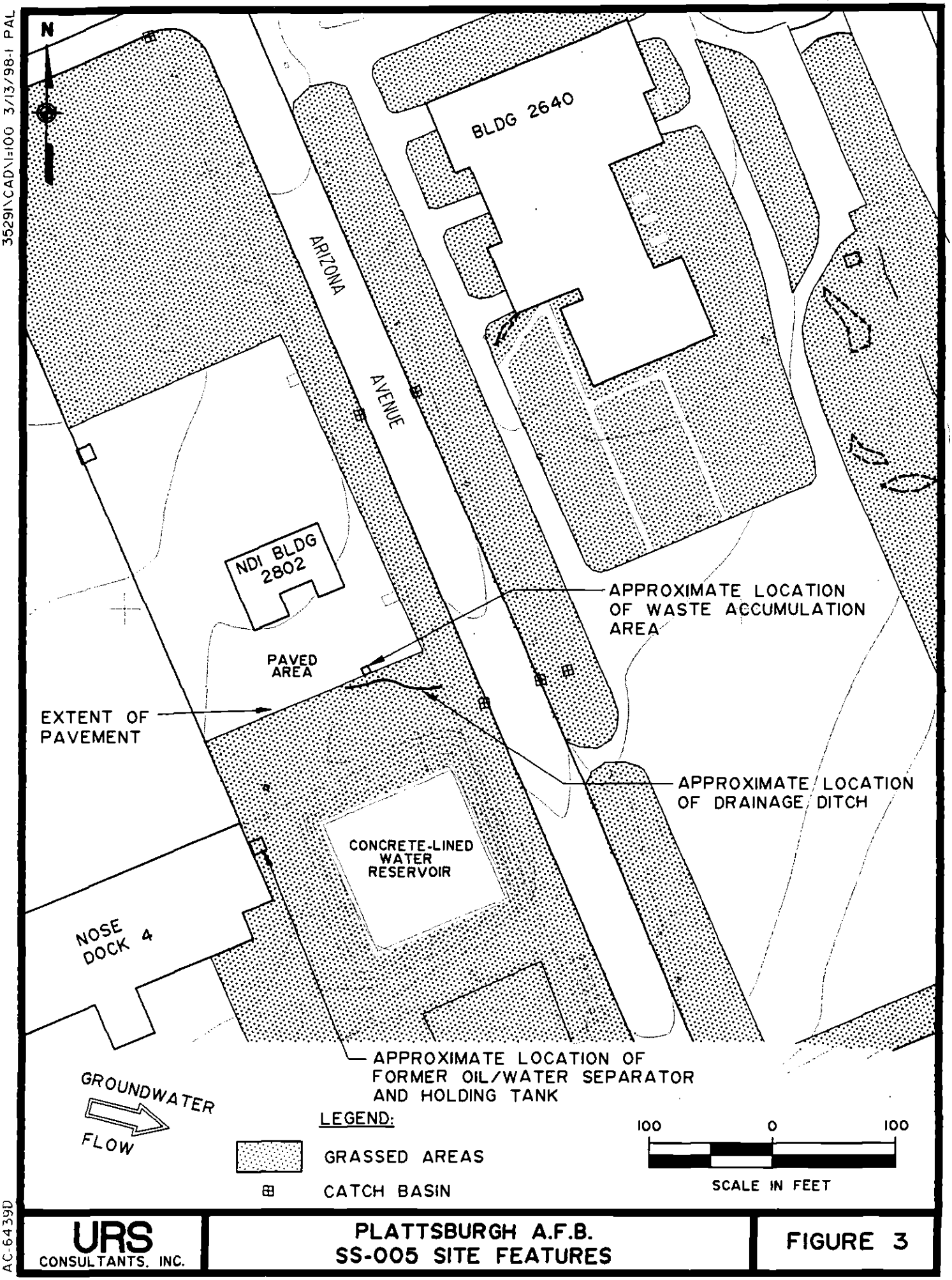
A drainage ditch runs southeasterly away from the former waste accumulation area. Precipitation that falls on the site is collected in the storm drainage system along Arizona Avenue. Storm drainage in this area is discharged to the Golf Course Drainage system and eventually flows into Lake Champlain. Because of the relatively low concentration of contaminants in surface soils at site SS-005, contamination is not expected to migrate away from the site via this surface drainage pathway. A former oil/water separator and a holding tank near Nose Dock 4 were located southwest of the NDI building. The former oil/water separator and holding-tank were removed as part of the basewide tank and oil/water separator removal program. NYSDEC Region V Spill Response Unit oversaw the removal and sampling associated with the oil/water separator. NYSDEC approval of the oil/water separator and holding tank closure is still pending as of the date of this ROD. Potential sources of contamination include surface spills, run-off from the waste accumulation area, and potential leaks from the former oil/water separator and holding tank. Site features are shown in Figure 3.

The site geology consists of a marine/lacustrine sand, ranging from 25 to 39 feet thick, overlying a relatively impermeable silt and clay unit. The groundwater table is shallow in the vicinity of SS-005, and lies approximately 4 feet below ground surface. Groundwater flows from the west toward the east and into Lake Champlain.

2.0 LAND USE AND RESPONSE HISTORY

A site inspection (SI) of the NDI Facility conducted in 1987 consisted of a records search, a soil organic vapor (SOV) survey, and soil sampling (E.C. Jordan Co. 1989). The records search revealed that no data was available regarding the site operations or type of waste stored at the site. The SOV samples, taken adjacent to Arizona Avenue, contained organic vapors that were approximately one order of magnitude higher than those taken next to Nose Dock 4. Surface soil samples contained traces of polynuclear aromatic hydrocarbons (PAHs), as well as high concentrations of petroleum hydrocarbons (PHCs) and volatile organics. Subsurface soil samples contained trace levels of solvents. Groundwater was not evaluated during the SI.

Between October 1992 and February 1993, a remedial investigation (RI) was performed at SS-005 to characterize the magnitude and extent of groundwater and soil contamination at the site. The RI included the sampling of surface soil [0-6 inches below ground surface (bgs)] at 20 locations, near-surface soil (0.5 to 2 feet bgs) at seven locations, and subsurface soils (>2 feet bgs) at three boring locations. In addition, three monitoring wells were installed and groundwater was sampled during sampling events in January and April 1993. Sampling locations (Figure 4) were concentrated near a drainage swale running past the former location of the waste accumulation area and in proximity to the oil/water separator at Nose Dock 4. The analytical results from the sampled media were used to assess the current and potential future human and ecological health risks due to onsite contaminants.



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PLATTSBURGH A.F.B.
SS-005 SITE FEATURES

FIGURE 3

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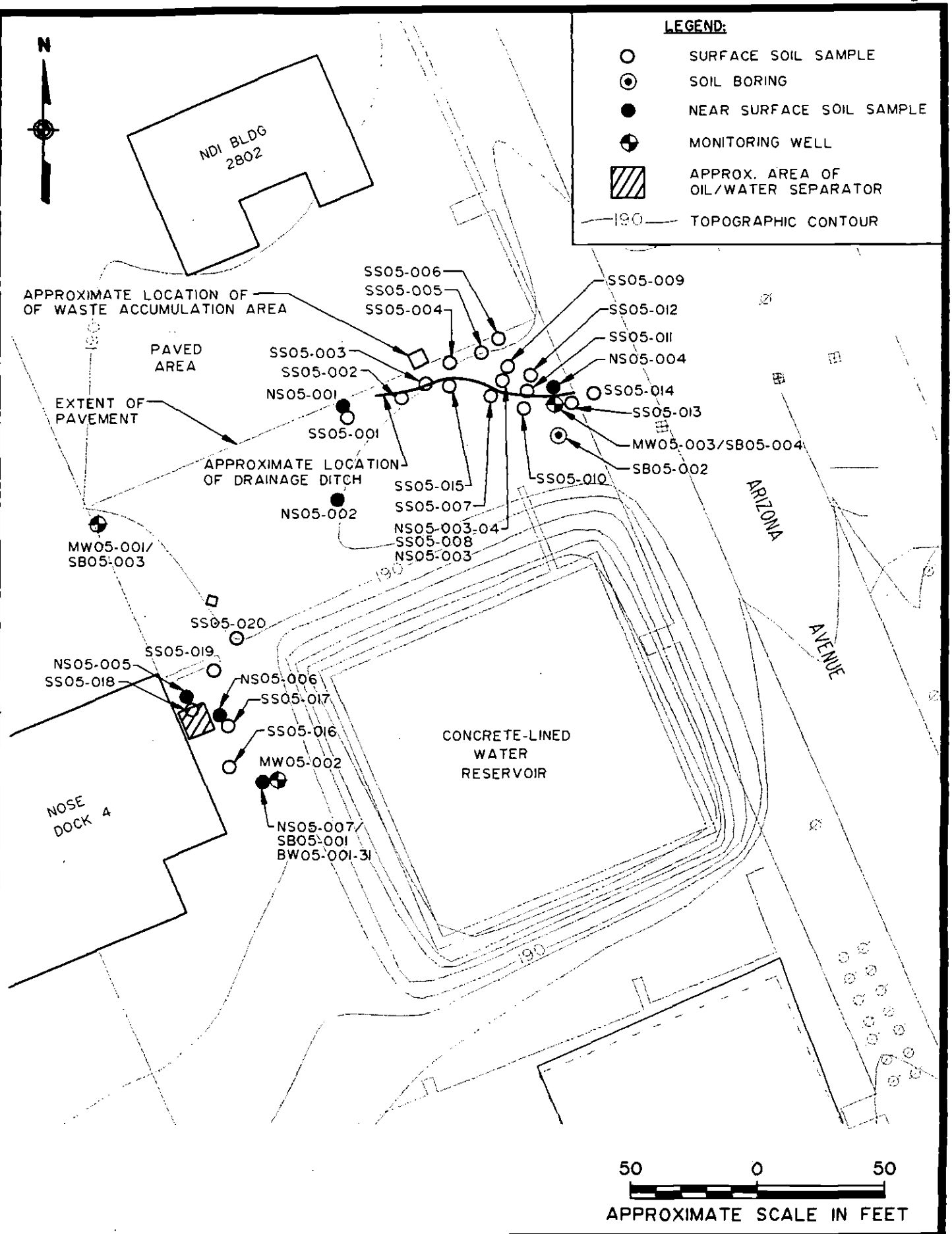

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PLATTSBURGH A.F.B. ENVIRONMENTAL SAMPLING AND MONITORING WELL LOCATIONS

FIGURE 4

3.0 COMMUNITY PARTICIPATION

Plattsburgh AFB has kept the community and other interested parties informed of the activities at SS-005 through informational and public meetings, and holding a 30-day public comment period from February 17 to March 18, 1998 to solicit public input. During this period, the public was invited to review the Proposed Plan, the Attachment I Sites Remedial Investigation Report (SS-005 is one of the Attachment I Sites addressed by the Federal Facilities Agreement), and to comment on the preferred alternative being considered. These documents, which comprise the Administrative Record for the SS-005 site, are available at the Information Repository located at the Feinberg Library.

Plattsburgh AFB hosted a public meeting on February 26, 1998 at the Old Court House, Second Floor Meeting Room, 133 Margaret Street to discuss data gathered at the site, the selected remedy, and the decision-making process. Public comments were recorded and transcribed, and a copy of the transcript was added to the Administrative Record and Information Repository, and are a part of this Record of Decision (Appendix A). The Air Force's response to all written comments received from the public during the public comment period and to all verbal comments made by the public at the public comment meeting is contained in the responsiveness summary, located in Appendix B of this ROD.

The Air Force, USEPA, and the NYSDEC have reviewed the Public Meeting Transcript and Responsiveness Summary presented in this ROD. It has been determined that no significant changes to the remedy, as it was originally presented in the Proposed Plan, were necessary.

4.0 SCOPE AND ROLE OF RESPONSE ACTION

Chemical contaminants are present at relatively low levels in the soil at SS-005. Based on the industrial use human health and ecological risk assessment (HRA) results, these chemicals do not pose a significant threat to human health or the environment.

Principle future threats at Site SS-005 include a potential for groundwater contaminant concentrations to increase beneath the site as a result of the upgradient FT-002 groundwater contaminant plume and an unevaluated potential risk from surface soil that could be present for land uses other than the current and planned future non-residential use. These principle threats are addressed by the preferred alternative presented in this ROD.

5.0 SUMMARY OF SITE CONTAMINATION

Soil contamination found at Site SS-005 can be evaluated by comparing the results to other criteria, advisories, and guidance values known as To-Be-Considered (TBC) values. The levels of contamination from organic compounds in soil (both surface and subsurface soil) were evaluated by comparing the detected concentrations to guidance values specified in the *Technical and Administrative Guidance Memorandum (TAGM) #4046* entitled, "Determination of Soil Cleanup Objectives and Cleanup Levels" (NYSDEC 1994). As recommended by TAGM #4046, levels of contamination from inorganic compounds in soil were evaluated by comparing the detected concentrations to site background levels (URS 1995).

For groundwater, contaminant levels were compared to groundwater applicable or relevant and appropriate requirements (ARARs), which are derived from the NYSDEC water quality standards and guidance values specified in NYSDEC *Technical and Operational Guidance Series (TOGS) 1.1.1* (October 1993), New York State Department of Health Drinking Water Standards (Subpart 5-1 of the New York State Sanitary Code), New York State water standards (Title 6 of New York State Rules and Regulations, Part 703), and USEPA drinking water standards (40 CFR 141). The concentration of metals in groundwater at the site were compared to basewide groundwater metal concentrations.

5.1 Surface Soil Contamination

Tables 1 and 2 and Figures 5A and 5B present a summary of the levels of contamination found in the SS-005 surface soil and a comparison to the guidance thresholds described in Section 5.0. No volatile organic compounds (VOCs), pesticides, or polychlorinated biphenyls (PCBs) were present above the guideline values. Six semivolatile organic compounds (SVOCs)[benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, and dibenzo(a,h)anthracene], all of which are PAHs, and seven metals (arsenic, barium, beryllium, cadmium, chromium, lead, and zinc) were detected above their respective guidance values.

In general, the most frequently detected SVOCs with the highest concentrations were found at the southeastern end of the drainage swale.

5.2 Subsurface Soil Contamination

Subsurface soil (including near-surface soil) samples were collected between 0.5 feet and 7 feet bgs. In general, VOCs and SVOCs were detected infrequently in the subsurface soil samples. Tables 1 and 2 and Figure 6 present a summary of the levels of contamination found in the SS-005 subsurface soil and a comparison to the respective soil guidance values (see Section 5.0). No pesticides or PCBs were present above guidance thresholds. However, two VOCs [methylene chloride and xylene (total)], three SVOCs [phenol, benzo(a)pyrene, and dibenzo(a,h)anthracene], and five metals (barium, cadmium, chromium, nickel, and zinc) exceeded their respective guidance values. All of the VOC and SVOC results that exceeded their guidance thresholds were obtained from samples at the southeastern end of the drainage swale.

5.3 Groundwater Contamination

A summary of the groundwater analytical results compared to their respective guideline values is given in Table 3 and Figure 7. Three metals (Aluminum, Iron, and Manganese) were detected in groundwater in concentrations above the ARARs, but these metals were not detected in either the groundwater or the soil at SS-005 above site background levels. Several organic compounds (VOCs and SVOCs) were detected in site groundwater, although none of the results exceeded ARARs. An evaluation of the analytical results for site soil seems to indicate that the organic contamination did not originate from SS-005. Rather, groundwater beneath Site SS-005 is within the contamination plume emanating from site FT-002, and the organic groundwater contamination detected here is attributable to that plume. Therefore, it appears that the soils at SS-005 are not a source of groundwater contamination.

6.0 SUMMARY OF SITE RISKS

During the RI, a baseline industrial use HRA was conducted to estimate the current and future risks at the site if no remedial action was taken. Possible human health and ecological risks were evaluated. Due to their close proximity and potentially overlapping areas of contamination, sites SS-005 and SS-006 (the

TABLE 1

SUMMARY OF ORGANIC COMPOUNDS DETECTED IN SS-005
SURFACE AND SUBSURFACE SOILS

ANALYTE	TYPE	GUIDANCE VALUES* (µg/kg)	SURFACE SOILS				SUBSURFACE SOILS (1)			
			FREQUENCY OF DETECTION	DETECTED MINIMUM CONCENTRATION (µg/kg)	DETECTED MAXIMUM CONCENTRATION (µg/kg)	DETECTED FREQUENCY ABOVE TBCs	FREQUENCY OF DETECTION	DETECTED MINIMUM CONCENTRATION (µg/kg)	DETECTED MAXIMUM CONCENTRATION (µg/kg)	DETECTED FREQUENCY ABOVE TBCs
Acetone	VOC	200	5/24	3	35	0/24	4/24	20	27	0/24
Methylene Chloride	VOC	100	0/24	--	--	0/24	4/24	4	4900	1/24
Toluene	VOC	1,500	0/24	--	--	0/24	2/24	4	8	0/24
Xylene (total)	VOC	1,200	1/24	2	2	0/24	2/24	96	17000	1/24
Phenol	SVOC	30	0/24	--	--	0/24	1/23	423	423	1/23
4-Methylphenol	SVOC	900	1/24	24	24	0/24	0/23	--	--	0/23
Benzoic Acid	SVOC	NS	9/24	39	104	NS	10/23	18	94	NS
Naphthalene	SVOC	13,000	4/24	7	1,300	0/24	0/23	--	--	0/23
2-Methylnaphthalene	SVOC	36,400	3/24	15	5,300	0/24	1/23	440	440	0/23
Acenaphthylene	SVOC	41,000	13/24	16	2,036	0/24	4/23	4	780	0/23
Acenaphthene	SVOC	50,000	6/24	11	157	0/24	0/23	--	--	0/23
2,4-Dinitrotoluene	SVOC	NS	0/24	--	--	NS	1/23	200	200	NS
Diethylphthalate	SVOC	7,100	0/24	--	--	0/24	2/23	20	23	0/23
Dibenzofuran	SVOC	6,200	2/24	28	41	0/24	0/23	--	--	0/23
Fluorene	SVOC	50,000	6/24	8	130	0/24	1/23	130	130	0/23
Phenanthrene	SVOC	50,000	15/24	12	1,572	0/24	7/23	2	58	0/23
Anthracene	SVOC	50,000	14/24	19	1,286	0/24	2/23	14	18	0/23
Carbazole	SVOC	NS	11/24	17	1,363	NS	1/23	21	21	NS
Di-n-butylphthalate	SVOC	8,100	0/24	--	--	0/24	1/23	16	16	0/23
Fluoranthene	SVOC	50,000	21/24	14	4,612	0/24	7/23	21	2600	0/23
Pyrene	SVOC	50,000	21/24	13	5,145	0/24	7/23	22	132	0/23

-- Indicates analyte not detected

* Values from NYSDEC Soil Cleanup Objectives and Cleanup Levels, TAGM HWR-94-4046, January 1994 unless otherwise indicated.

- Exceeds Guidance Value

1 - Includes near-surface soil samples.

VOC = Volatile Organic Compound

SVOC = Semivolatile Organic Compound

PEST = Pesticide

PCB = Polychlorinated Biphenyl

NS=Not Specified

1154 14

TABLE 1 (continued)

SUMMARY OF ORGANIC COMPOUNDS DETECTED IN SS-005
SURFACE AND SUBSURFACE SOILS

ANALYTE	TYPE	GUIDANCE VALUES* (µg/kg)	SURFACE SOILS				SUBSURFACE SOILS (1)			
			FREQUENCY OF DETECTION	DETECTED MINIMUM CONCENTRATION (µg/kg)	DETECTED MAXIMUM CONCENTRATION (µg/kg)	DETECTED FREQUENCY ABOVE TBCs	FREQUENCY OF DETECTION	DETECTED MINIMUM CONCENTRATION (µg/kg)	DETECTED MAXIMUM CONCENTRATION (µg/kg)	DETECTED FREQUENCY ABOVE TBCs
Benzo(a)anthracene	SVOC	224	12/24	19	3,537	6/24	3/23	14	51	0/23
Butylbenzylphthalate	SVOC	50,000	1/24	53	53	0/24	0/23	--	--	0/23
Chrysene	SVOC	400	14/24	26	4,823	6/24	5/23	21	99	0/23
Di-n-octylphthalate	SVOC	50,000	0/24	--	--	0/24	3/23	4	13	0/23
bis(2-Ethylhexyl)phthalate	SVOC	50,000	14/24	33	371	0/24	14/23	27	160	0/23
Benzo(b)fluoranthene	SVOC	1,100	20/24	14	4,394	4/24	6/23	18	72	0/23
Benzo(k)fluoranthene	SVOC	1,100	19/24	14	5,573	3/24	5/23	20	82	0/23
Benzo(a)pyrene	SVOC	61	21/24	15	5,681	17/24	7/23	9	77	1/23
Indeno(1,2,3-cd)pyrene	SVOC	3,200	22/24	22	2,800	0/24	6/23	5	75	0/23
Dibenz(a,h)anthracene	SVOC	14	11/24	15	1,000	11/24	1/23	35	35	1/23
Benzo(g,h,i)perylene	SVOC	50,000	22/24	18	2,500	0/24	5/23	19	93	0/23
Endosulfan II	PEST	900	0/4	--	--	0/4	1/5	3.5	3.5	0/5
4,4'-DDD	PEST	2,900	2/4	1.2	3	0/4	0/5	--	--	0/5
4,4'-DDT	PEST	2,100	2/4	15	24	0/4	2/5	4.6	6.8	0/5
Methoxychlor	PEST	10,000	0/4	--	--	0/4	1/5	2.5	2.5	0/5
Aroclor-1254 (subsurface)	PCB	10,000	0/4	--	--	0/4	1/5	7	7	0/5
Aroclor-1260 (surface)	PCB	1,000	3/4	39	76	0/4	0/5	--	--	0/5

-- Indicates analyte not detected

* Values from NYSDEC Soil Cleanup Objectives and Cleanup Levels, TAGM HWR-94-4046, January 1994 unless otherwise indicated.

Shaded - Exceeds Guidance Value

1 - Includes near-surface soil samples.

VOC = Volatile Organic Compound

SVOC = Semivolatile Organic Compound

PEST = Pesticide

PCB = Polychlorinated Biphenyl

NS=Not Specified

TABLE 2

SUMMARY OF INORGANIC COMPOUNDS DETECTED IN SS-005
SURFACE AND SUBSURFACE SOILS

ANALYTE	TYPE	GUIDANCE VALUES* (mg/kg)	SURFACE SOILS				SUBSURFACE SOILS (1)			
			FREQUENCY OF DETECTION	DETECTED MINIMUM CONCENTRATION (mg/kg)	DETECTED MAXIMUM CONCENTRATION (mg/kg)	DETECTED FREQUENCY ABOVE TBCs	FREQUENCY OF DETECTION	DETECTED MINIMUM CONCENTRATION (mg/kg)	DETECTED MAXIMUM CONCENTRATION (mg/kg)	DETECTED FREQUENCY ABOVE TBCs
Aluminum	MET	8,510 †	25/25	1324	7,453	0/25	24/24	794	3524	0/24
Arsenic	MET	7.5	5/25	0.43	55	1/25	4/24	0.34	0.81	0/24
Barium	MET	300	13/25	14.6	721	2/25	9/24	7.9	340	2/24
Beryllium	MET	0.74 †	2/25	1	1	2/25	0/24	--	--	0/24
Cadmium	MET	1.3 †	19/25	0.59	10	16/25	8/24	1	2	2/24
Calcium	MET	30,200 †	25/25	879	20,100	0/25	14/24	583	4104	0/24
Chromium	MET	19.5 †	25/25	3	44	9/25	23/24	2.9	36	1/24
Cobalt	MET	30	4/25	1.4	2	0/25	6/24	1	1.5	0/24
Copper	MET	41.1 †	17/25	3.7	17	0/25	9/24	1.5	7.7	0/24
Iron	MET	36,700 †	25/25	2935	10,567	0/25	24/24	1037	6552	0/24
Lead	MET	79.4 †	21/25	13.9	254	11/25	10/24	2.1	75	0/24
Magnesium	MET	3,340 †	12/25	616	2,820	0/25	13/24	622	1911	0/24
Manganese	MET	474 †	25/25	19	128	0/25	24/24	8	107	0/24
Nickel	MET	13	12/25	2	10.4	0/25	9/24	2.1	83	2/24
Potassium	MET	929 †	4/25	175	415	0/25	6/24	162	256	0/24
Sodium	MET	520 †	4/25	41.8	45.6	0/25	6/24	26	39.9	0/24
Vanadium	MET	150	23/25	7	34	0/25	12/24	4	13.5	0/24
Zinc	MET	63.4 †	25/25	11	190	12/25	22/24	7	433	3/24

-- Indicates analyte not detected

* Values from NYSDEC Soil Cleanup Objectives and Cleanup Levels, TAGM HWR-94-4046, January 1994 unless otherwise indicated.

† Soil background "To Be Considered" (TBC) value from "Background Surface Soil & Groundwater Survey for the Plattsburgh Air Force Base" (URS, 1995).

1 - Includes near-surface soil samples.

MET = Metal

- Exceeds Guidance Value

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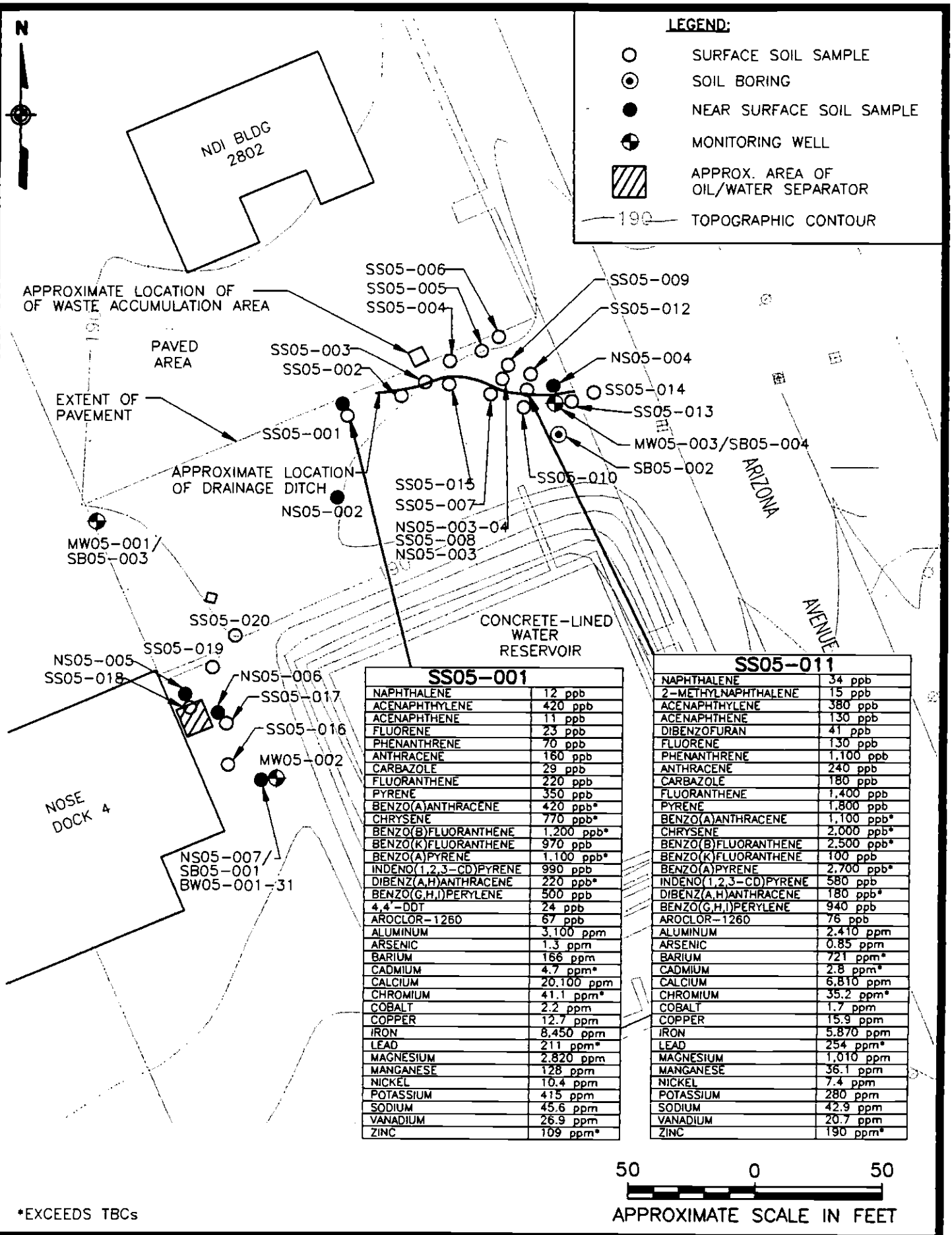

SS05-001	
NAPHTHALENE	12 ppb
ACENAPHTHYLENE	420 ppb
ACENAPHTHENE	11 ppb
FLUORENE	23 ppb
PHENANTHRENE	70 ppb
ANTHRACENE	160 ppb
CARBAZOLE	29 ppb
FLUORANTHENE	220 ppb
PYRENE	350 ppb
BENZO(A)ANTHRACENE	420 ppb*
CHRYSENE	770 ppb*
BENZO(B)FLUORANTHENE	1,200 ppb*
BENZO(K)FLUORANTHENE	970 ppb
BENZO(A)PYRENE	1,100 ppb*
INDENO(1,2,3-CD)PYRENE	990 ppb
DIBENZ(A,H)ANTHRACENE	220 ppb*
BENZO(G,H,I)PERYLENE	500 ppb
4,4'-DDT	24 ppb
AROCLOR-1260	67 ppb
ALUMINUM	3,100 ppm
ARSENIC	1.3 ppm
BARIUM	166 ppm
CADMIUM	4.7 ppm*
CALCIUM	20,100 ppm
CHROMIUM	41.1 ppm*
COBALT	2.2 ppm
COPPER	12.7 ppm
IRON	8,450 ppm
LEAD	211 ppm*
MAGNESIUM	2,820 ppm
MANGANESE	128 ppm
NICKEL	10.4 ppm
POTASSIUM	415 ppm
SODIUM	45.6 ppm
VANADIUM	26.9 ppm
ZINC	109 ppm*

SS05-011	
NAPHTHALENE	34 ppb
2-METHYLNAPHTHALENE	15 ppb
ACENAPHTHYLENE	380 ppb
ACENAPHTHENE	130 ppb
DIBENZOFURAN	41 ppb
FLUORENE	130 ppb
PHENANTHRENE	1,100 ppb
ANTHRACENE	240 ppb
CARBAZOLE	180 ppb
FLUORANTHENE	1,400 ppb
PYRENE	1,800 ppb
BENZO(A)ANTHRACENE	1,100 ppb*
CHRYSENE	2,000 ppb*
BENZO(B)FLUORANTHENE	2,500 ppb*
BENZO(K)FLUORANTHENE	100 ppb
BENZO(A)PYRENE	2,700 ppb*
INDENO(1,2,3-CD)PYRENE	580 ppb
DIBENZ(A,H)ANTHRACENE	180 ppb*
BENZO(G,H,I)PERYLENE	940 ppb
AROCLOR-1260	76 ppb
ALUMINUM	2,410 ppm
ARSENIC	0.85 ppm
BARIUM	721 ppm*
CADMIUM	2.8 ppm*
CALCIUM	6,810 ppm
CHROMIUM	35.2 ppm*
COBALT	1.7 ppm
COPPER	15.9 ppm
IRON	5,870 ppm
LEAD	254 ppm*
MAGNESIUM	1,010 ppm
MANGANESE	36.1 ppm
NICKEL	7.4 ppm
POTASSIUM	280 ppm
SODIUM	42.9 ppm
VANADIUM	20.7 ppm
ZINC	190 ppm*

*EXCEEDS TBCs

AC-12075

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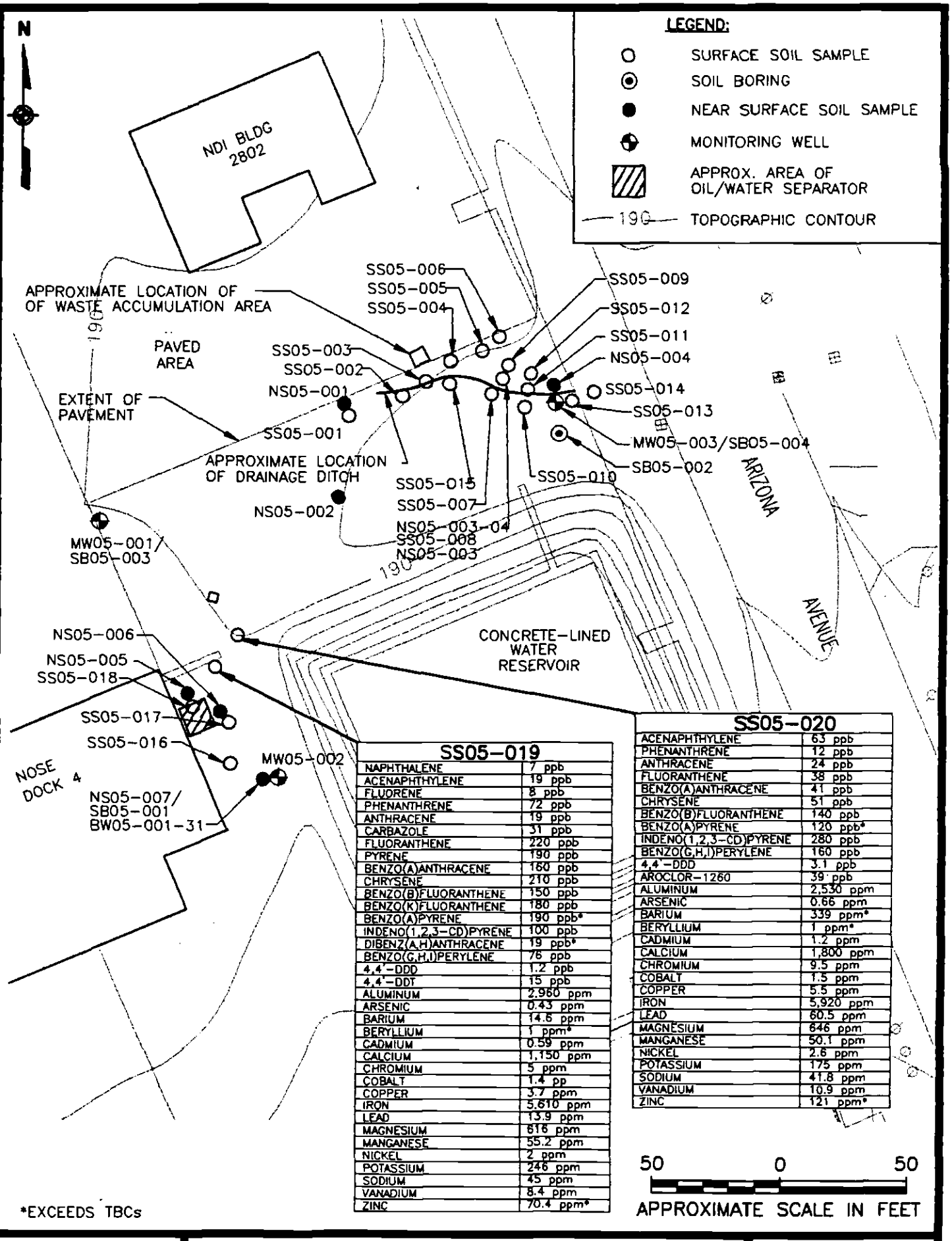
PLATTSBURGH A.F.B. DETECTED SURFACE SOIL ANALYTICAL RESULTS

FIGURE 5A

35291\CAD\1=50 10/29/97-2 RAL



SS05-019	
NAPHTHALENE	7 ppb
ACENAPHTHYLENE	19 ppb
FLUORENE	8 ppb
PHENANTHRENE	72 ppb
ANTHRACENE	19 ppb
CARBAZOLE	31 ppb
FLUORANTHENE	220 ppb
PYRENE	190 ppb
BENZO(A)ANTHRACENE	160 ppb
CHRYSENE	210 ppb
BENZO(B)FLUORANTHENE	150 ppb
BENZO(K)FLUORANTHENE	180 ppb
BENZO(A)PYRENE	190 ppb*
INDENO(1,2,3-CD)PYRENE	100 ppb
DIBENZ(A,H)ANTHRACENE	19 ppb*
BENZO(G,H,I)PERYLENE	76 ppb
4,4'-DDD	1.2 ppb
4,4'-DDT	15 ppb
ALUMINUM	2,960 ppm
ARSENIC	0.43 ppm
BARIUM	14.6 ppm
BERYLLIUM	1 ppm*
CADMIUM	0.59 ppm
CALCIUM	1,150 ppm
CHROMIUM	5 ppm
COBALT	1.4 pp
COPPER	3.7 ppm
IRON	5,610 ppm
LEAD	13.9 ppm
MAGNESIUM	616 ppm
MANGANESE	55.2 ppm
NICKEL	2 ppm
POTASSIUM	246 ppm
SODIUM	45 ppm
VANADIUM	8.4 ppm
ZINC	70.4 ppm*

SS05-020	
ACENAPHTHYLENE	63 ppb
PHENANTHRENE	12 ppb
ANTHRACENE	24 ppb
FLUORANTHENE	38 ppb
BENZO(A)ANTHRACENE	41 ppb
CHRYSENE	51 ppb
BENZO(B)FLUORANTHENE	140 ppb
BENZO(A)PYRENE	120 ppb*
INDENO(1,2,3-CD)PYRENE	280 ppb
BENZO(G,H,I)PERYLENE	160 ppb
4,4'-DDD	3.1 ppb
AROCLOR-1260	39 ppb
ALUMINUM	2,530 ppm
ARSENIC	0.66 ppm
BARIUM	339 ppm*
BERYLLIUM	1 ppm*
CADMIUM	1.2 ppm
CALCIUM	1,800 ppm
CHROMIUM	9.5 ppm
COBALT	1.5 ppm
COPPER	5.5 ppm
IRON	5,920 ppm
LEAD	60.5 ppm
MAGNESIUM	646 ppm
MANGANESE	50.1 ppm
NICKEL	2.6 ppm
POTASSIUM	175 ppm
SODIUM	41.8 ppm
VANADIUM	10.9 ppm
ZINC	121 ppm*

50 0 50

APPROXIMATE SCALE IN FEET

*EXCEEDS TBCs

AC-12081

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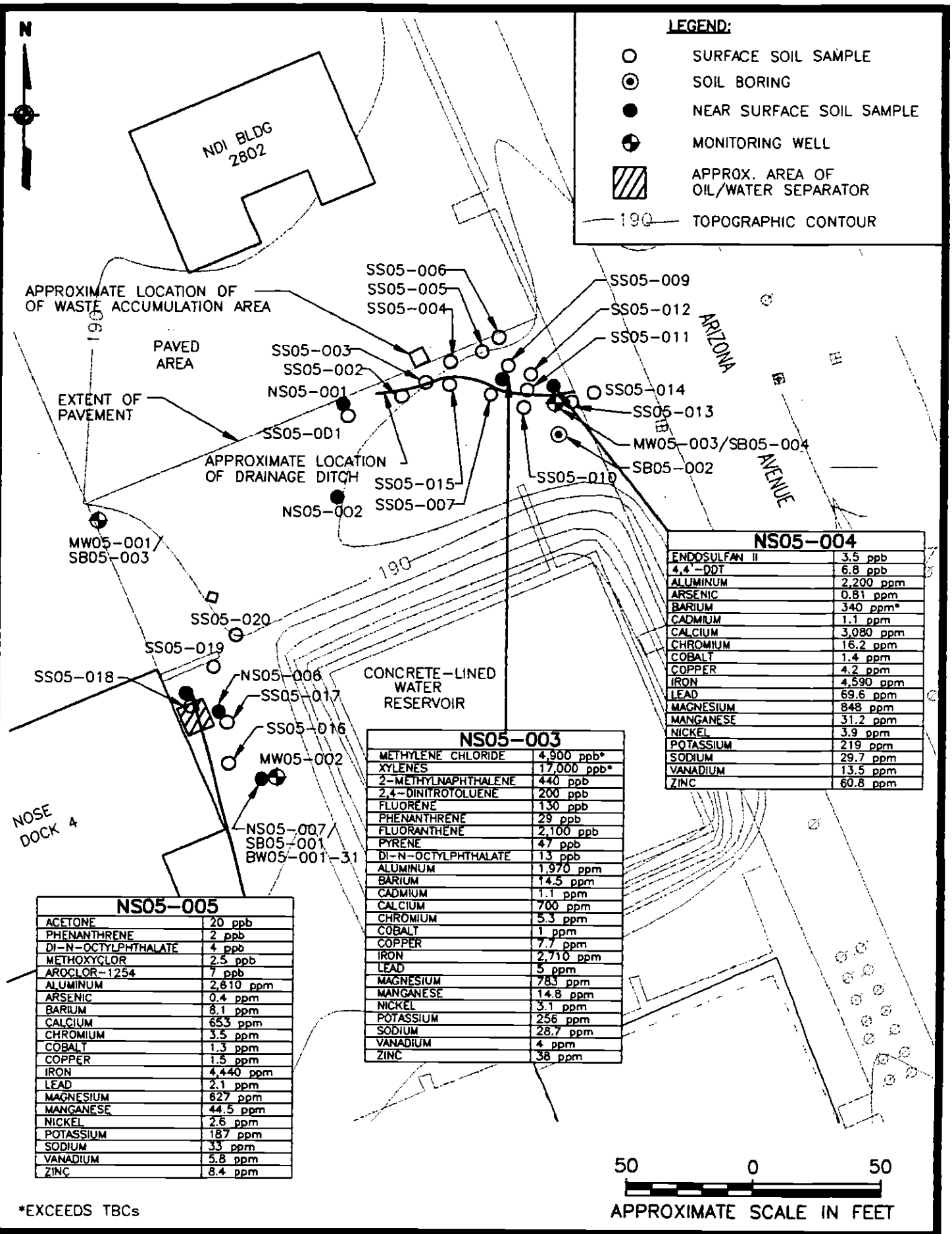
PLATTSBURGH A.F.B.
DETECTED SURFACE SOIL ANALYTICAL RESULTS

FIGURE 5B

35291\CAD\1=50 10/29/97-2 RAL



NS05-004	
ENDOSULFAN II	3.5 ppb
4,4'-DDT	6.8 ppb
ALUMINUM	2,200 ppm
ARSENIC	0.81 ppm
BARIUM	340 ppm*
CADMIUM	1.1 ppm
CALCIUM	3,080 ppm
CHROMIUM	16.2 ppm
COBALT	1.4 ppm
COPPER	4.2 ppm
IRON	4,590 ppm
LEAD	69.6 ppm
MAGNESIUM	848 ppm
MANGANESE	31.2 ppm
NICKEL	3.9 ppm
POTASSIUM	219 ppm
SODIUM	29.7 ppm
VANADIUM	13.5 ppm
ZINC	60.8 ppm

NS05-003	
METHYLENE CHLORIDE	4,900 ppb*
XYLENES	17,000 ppb*
2-METHYLNAPHTHALENE	440 ppb
2,4-DINITROTOLUENE	200 ppb
FLUORENE	130 ppb
PHENANTHRENE	29 ppb
FLUORANTHENE	2,100 ppb
PYRENE	47 ppb
DI-N-OCTYLPHTHALATE	13 ppb
ALUMINUM	1,970 ppm
BARIUM	14.5 ppm
CADMIUM	1.1 ppm
CALCIUM	700 ppm
CHROMIUM	5.3 ppm
COBALT	1 ppm
COPPER	7.7 ppm
IRON	2,710 ppm
LEAD	5 ppm
MAGNESIUM	783 ppm
MANGANESE	14.8 ppm
NICKEL	3.1 ppm
POTASSIUM	256 ppm
SODIUM	28.7 ppm
VANADIUM	4 ppm
ZINC	38 ppm

NS05-005	
ACETONE	20 ppb
PHENANTHRENE	2 ppb
DI-N-OCTYLPHTHALATE	4 ppb
METHOXYCLOR	2.5 ppb
AROCLOR-1254	7 ppb
ALUMINUM	2,610 ppm
ARSENIC	0.4 ppm
BARIUM	8.1 ppm
CALCIUM	653 ppm
CHROMIUM	3.5 ppm
COBALT	1.3 ppm
COPPER	1.5 ppm
IRON	4,440 ppm
LEAD	2.1 ppm
MAGNESIUM	627 ppm
MANGANESE	44.5 ppm
NICKEL	2.6 ppm
POTASSIUM	187 ppm
SODIUM	33 ppm
VANADIUM	5.8 ppm
ZINC	8.4 ppm

50 0 50

APPROXIMATE SCALE IN FEET

*EXCEEDS TBCs

AC-12076

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DETECTED NEAR-SURFACE SOIL ANALYTICAL RESULTS

FIGURE 6

1154 20

TABLE 3

CHARACTER OF GROUNDWATER CONTAMINATION FOR SITE SS-005

ANALYTE	TYPE	ARAR VALUE (µg/L)	FREQUENCY OF DETECTION	DETECTED MAXIMUM CONCENTRATION (µg/L)
Carbon Tetrachloride	VOC	5.0 *	1/6	0.1
Bromodichloromethane	VOC	50 *	1/6	0.9
Trichloroethene	VOC	5.0 *	3/6	3.0
Benzene	VOC	0.7 *	2/6	0.2
Bromoform	VOC	50 *	1/6	1.0
Toluene	VOC	5.0 *	1/6	0.1
Chlorobenzene	VOC	5.0 *	1/6	0.3
Diethylphthalate	SVOC	50 *	1/6	0.2
Carbazole	SVOC	NR	1/51/5	0.1
Di-n-butylphthalate	SVOC	50 *	2/6	1.0
Fluoranthene	SVOC	50 *	1/5	0.1
Pyrene	SVOC	50 *	1/5	0.2
Butylbenzylphthalate	SVOC	50 *	2/5	0.4
bis(2-Ethylhexyl)phthalate	SVOC	50 *	1/5	3.0
Aluminum	METAL	50 to 200***	3/3	6,820
Arsenic	METAL	25 *	4/6	8.1
Barium	METAL	1,000 *	5/6	45.4
Cadmium	METAL	5.0 **	1/6	2.1
Calcium	METAL	NR	3/3	55,700
Chromium	METAL	50 *	2/6	7.2
Cobalt	METAL	NR	2/3	4.7
Copper	METAL	200 *	3/3	15.4
Iron	METAL	300 *	3/3	25,200
Lead	METAL	15 **	6/6	6.9
Magnesium	METAL	35,000 *	3/3	11,200
Manganese	METAL	50 ***	3/3	3,530
Potassium	METAL	NR	3/3	4,490
Sodium	METAL	20,000 *	3/3	4,960
Vanadium	METAL	NR	2/3	28.2

* - NYSDEC Water Quality Standards (6 NYCRR Part 703)

** - USEPA Drinking Water Standards 40 CFR 141

*** - USEPA Secondary Maximum Contaminant Levels 40 CFR 143

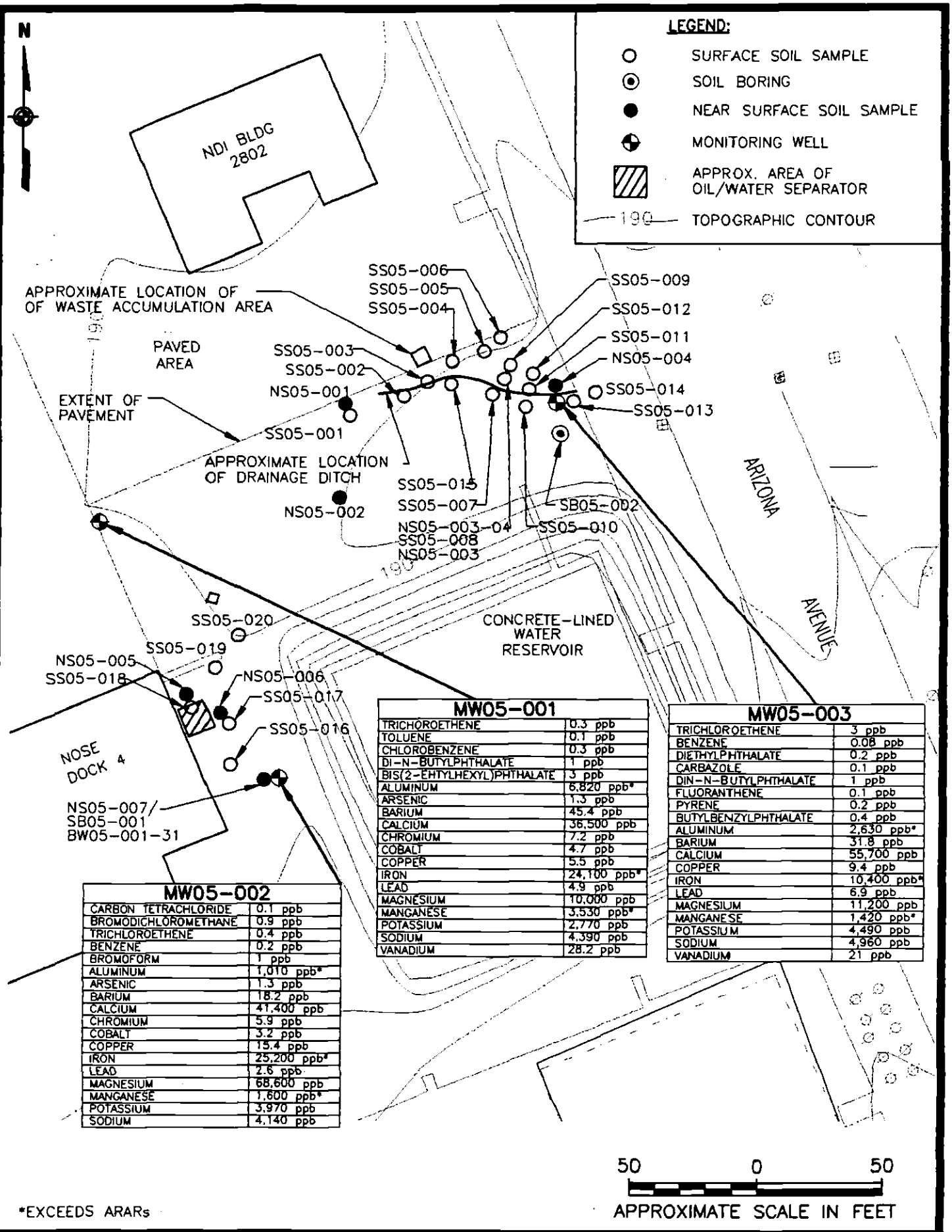
[redacted] - Exceeds ARAR Value

Highlighted concentration indicate exceedances of guidance value

VOC = Volatile Organic Compound

SVOC = Semivolatile Organic Compound

35291\CAD\1=50 10/29/97-2 RAL



MW05-001

TRICHOROETHENE	0.3 ppb
TOLUENE	0.1 ppb
CHLOROBENZENE	0.3 ppb
DI-N-BUTYLPHTHALATE	1 ppb
BIS(2-EHTYLHEXYL)PHTHALATE	3 ppb
ALUMINUM	6,820 ppb*
ARSENIC	1.3 ppb
BARIUM	45.4 ppb
CALCIUM	36,500 ppb
CHROMIUM	7.2 ppb
COBALT	4.7 ppb
COPPER	5.5 ppb
IRON	24,100 ppb*
LEAD	4.9 ppb
MAGNESIUM	10,000 ppb
MANGANESE	3,530 ppb*
POTASSIUM	2,770 ppb
SODIUM	4,390 ppb
VANADIUM	28.2 ppb

MW05-003

TRICHLOROETHENE	3 ppb
BENZENE	0.08 ppb
DIETHYLPHTHALATE	0.2 ppb
CARBAZOLE	0.1 ppb
DIN-N-BUTYLPHTHALATE	1 ppb
FLUORANTHENE	0.1 ppb
PYRENE	0.2 ppb
BUTYLBENZYLPHTHALATE	0.4 ppb
ALUMINUM	2,630 ppb*
BARIUM	31.8 ppb
CALCIUM	55,700 ppb
COPPER	9.4 ppb
IRON	10,400 ppb*
LEAD	6.9 ppb
MAGNESIUM	11,200 ppb
MANGANESE	1,420 ppb*
POTASSIUM	4,490 ppb
SODIUM	4,960 ppb
VANADIUM	21 ppb

MW05-002

CARBON TETRACHLORIDE	0.1 ppb
BROMODICHLOROMETHANE	0.9 ppb
TRICHLOROETHENE	0.4 ppb
BENZENE	0.2 ppb
BROMOFORM	1 ppb
ALUMINUM	1,010 ppb*
ARSENIC	1.3 ppb
BARIUM	18.2 ppb
CALCIUM	41,400 ppb
CHROMIUM	5.9 ppb
COBALT	3.2 ppb
COPPER	15.4 ppb
IRON	25,200 ppb*
LEAD	2.6 ppb
MAGNESIUM	68,600 ppb
MANGANESE	1,600 ppb*
POTASSIUM	3,970 ppb
SODIUM	4,140 ppb

*EXCEEDS ARARs

AC-12077

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DETECTED GROUNDWATER ANALYTICAL RESULTS

FIGURE 7

Aerospace Ground Equipment Soil Operable Unit) were evaluated as one area. Chemicals of potential concern (CPCs) for the two sites (Table 4) were chosen based on frequency of detection, chemical-specific toxicity information, and exceedance of background levels (for inorganics only).

6.1 Human Health Risk Assessment

Five steps are followed in assessing site-related human health risks: *Hazard Identification* - determines the chemicals of concern at the site based on toxicity, frequency of occurrence, and concentration. *Exposure Assessment* - estimates the magnitude of actual and/or potential human exposures, and the pathways (e.g., dermal contact with soil) by which humans potentially are exposed. *Toxicity Assessment* - determines adverse health effects associated with chemical exposures and the relationship between magnitude of exposure (dose) and severity of adverse effects (response). *Risk Characterization* - summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site-related risks. *Uncertainty Analysis* - qualifies the quantitative results of the risk assessment based upon the uncertainty associated with the assumptions made in the analysis. Generally, assumptions made in the assessment process are conservative and yield a reasonable overestimation, rather than an underestimation of risk.

The human HRA follows federal guidelines to estimate the potential carcinogenic (i.e., cancer-causing) and adverse noncarcinogenic health effects due to potential exposure to site contaminants of concern from assumed exposure scenarios and pathways. These guidelines consider an excess upper bound lifetime cancer risk to an individual to be acceptable if it is calculated to be less than one-in-one million (10^{-6}), and risks in the range of one-in-ten thousand (10^{-4}) to one-in-one million are evaluated on a case by case basis. The guidance also specifies that the maximum health hazard index (which reflects the adverse noncarcinogenic effects for a human receptor) less than or equal to 1.0. The Hazard Index (HI) is a representation of risk based on a quotient or ratio of chronic daily intake to a reference (safe) dose. An HI greater than 1.0 indicates a potential of adverse noncarcinogenic health effects.

Two human exposure scenarios were evaluated as part of the human HRA for site SS-005 and SS-006 and are summarized in Table 5.

A) Current Scenario - This scenario assumes that civilian personnel conducting landscape work may come in contact with contaminated soils. Potential routes of exposure for this scenario include incidental ingestion of and dermal contact with surface soil. Because there is no current use of the groundwater at SS-005, there is little likelihood of human contact with the contaminants in this medium under this scenario.

B) Future Scenario - This scenario accounts for future industrial activities at the SS-005 site:

Future utility, maintenance or construction activities may result in disrupted soil (e.g., excavation) which potentially could expose utility/construction workers to site contaminants in surface and subsurface soil. This exposure would be similar to that estimated for civilian landscape workers in the current exposure scenario (above) with the additional potential to inhale fugitive dust.

Future Industrial Workers at the site could potentially be exposed to surface and subsurface soil after future development of the site through ingestion and dermal contact with soil. Dermal contact with and ingestion of groundwater were also evaluated for this scenario.

Given that the site is slated for industrial use (PARC 1995) and the deed/lease will prohibit residential use as specified in this ROD for the site, its development for residential use is unlikely.

1154 23

TABLE 4

CHEMICALS OF POTENTIAL CONCERN FOR SS-005 AND SS-006 SURFACE AND SUBSURFACE SOILS

ANALYTE	TYPE	SURFACE SOILS		SUBSURFACE SOILS	
		FREQUENCY OF DETECTION	CHEMICAL OF CONCERN	FREQUENCY OF DETECTION	CHEMICAL OF CONCERN
Methylene Chloride	VOC	0/30		2/24	X
Trichloroethene	VOC	1/30		0/24	
Toluene	VOC	0/30		2/24	X
Tetrachloroethene	VOC	1/30		0/24	
Xylene (total)	VOC	1/30		1/24	
Acenaphthene	SVOC	4/30	X	1/24	X
Acenaphthylene	SVOC	10/30	X	3/24	
Anthracene	SVOC	12/30	X	2/22	X
Benzoic Acid	SVOC	12/30	X	11/24	
Benzo(a)anthracene	SVOC	17/30	X	5/24	X
Benzo(b)fluoranthene	SVOC	22/30	X	6/24	X
Benzo(k)fluoranthene	SVOC	22/30	X	6/24	X
Benzo(a)pyrene	SVOC	23/30	X	4/24	X
Benzo(g,h,i)perylene	SVOC	22/30	X	5/24	
bis(2-Ethylhexyl)phthalate	SVOC	22/30	X	1/24	X
Butylbenzylphthalate	SVOC	1/30		0/24	
Carbazole	SVOC	12/30	X	2/24	
4-Chlorophenyl-phenylether	SVOC	0/30		1/24	
4-Chloro-3-methylphenol	SVOC	0/30		1/24	
Chrysene	SVOC	20/30	X	13/24	X
Dibenzofuran	SVOC	2/30	X	0/24	
Dibenz(a,h)anthracene	SVOC	10/30	X	4/24	X
3,3-Dichlorobenzidine	SVOC	0/30		4/24	X
2,4-Dimethylphenol	SVOC	0/30		11/24	X
Dimethylphthalate	SVOC	0/30		3/24	X
2,4-Dinitrotoluene	SVOC	0/30		2/24	X
Di-n-butylphthalate	SVOC	0/30		7/24	X
2,6-Dinitrotoluene	SVOC	1/30		0/24	
Di-n-octylphthalate	SVOC	0/30		7/24	X
Fluoranthene	SVOC	24/30	X	8/24	X
Fluorene	SVOC	6/30	X	0/24	
Indeno(1,2,3-c,d)pyrene	SVOC	22/30	X	5/24	X
2-Methylnaphthalene	SVOC	3/30	X	0/24	
4-Methylphenol	SVOC	1/30		0/24	
Naphthalene	SVOC	3/30	X	0/24	
Pentachlorophenol	SVOC	0/30		7/24	X
Phenanthrene	SVOC	18/30	X	2/24	X
Phenol	SVOC	0/30		1/24	
Pyrene	SVOC	24/30	X	5/24	X

-- Indicates analyte not detected

VOC = Volatile Organic Compound

SVOC = Semivolatile Organic Compound

TABLE 4 (cont'd)

CHEMICALS OF POTENTIAL CONCERN FOR SS-005 AND SS-006
SURFACE AND SUBSURFACE SOILS

ANALYTE	TYPE	SURFACE SOILS		SUBSURFACE SOILS	
		FREQUENCY OF DETECTION	CHEMICAL OF CONCERN	FREQUENCY OF DETECTION	CHEMICAL OF CONCERN
Aroclor-1254	PCB	0/6		1/6	X
Aroclor-1260	PCB	3/6	X	0/6	
4.4'-DDD	PEST	2/6	X	0/6	
4.4-DDT	PEST	2/6	X	2/6	X
Endosulfan II	PEST	0/6		1/6	X
Methoxychlor	PEST	0/6		1/6	X
Aluminum	METAL	30/30		24/24	
Antimony	METAL	25/30	X	18/24	X
Arsenic	METAL	29/30	X	23/24	X
Barium	METAL	30/30	X	24/24	X
Beryllium	METAL	26/30	X	18/24	X
Cadmium	METAL	29/30	X	21/24	X
Calcium	METAL	30/30		24/24	
Chromium	METAL	30/30	X	24/24	X
Cobalt	METAL	30/30		24/24	
Copper	METAL	30/30		24/24	
Iron	METAL	30/30		24/24	
Lead	METAL	30/30		24/24	
Magnesium	METAL	30/30		24/24	
Manganese	METAL	30/30		24/24	
Nickel	METAL	30/30	X	24/24	X
Potassium	METAL	30/30		24/24	
Selenium	METAL	25/30	X	18/24	X
Silver	METAL	25/30	X	18/24	X
Sodium	METAL	30/30		24/24	
Thallium	METAL	25/30		22/24	
Vanadium	METAL	30/30	X	24/24	
Zinc	METAL	30/30	X	24/24	X

-- Indicates analyte not detected

PEST = Pesticide

PCB = Polychlorinated Biphenyl

TABLE 5

SUMMARY OF HAZARD INDICES AND CANCER RISKS
PLATTSBURGH AIR FORCE BASE
SITES SS-005 & SS-006

EXPOSURE POPULATION AND PATHWAY	HAZARD INDEX	CANCER RISK
CURRENT SCENARIO		
CIVILIAN LANDSCAPE WORKER		
Ingestion of Surface Soil	6E-02	1E-05
Dermal Contact with Surface Soil	1E-02	2E-07
TOTAL PATHWAY HAZARD INDEX/CANCER RISK:	**7E-02**	**1E-05**
FUTURE SCENARIO		
SITE WORKER		
Ingestion of Subsurface Soil	9E-04	1E-07
Dermal Contact with Subsurface Soil	2E-03	1E-08
Ingestion of Groundwater	2E-01	3E-05
Dermal Contact with Groundwater	3E-04	2E-08
TOTAL PATHWAY HAZARD INDEX/CANCER RISK	**2E-01**	**3E-05**
CONSTRUCTION/UTILITY MAINTENANCE WORKER		
Ingestion of Soil	6E-02	4E-07
Dermal Contact with Soil	8E-02	6E-10
Inhalation of Respirable Particulates from Soil	6E-03	3E-07
TOTAL PATHWAY HAZARD INDEX/CANCER RISK	**7E-02**	**7E-07**

For current land use, the total cancer risk for the civilian landscape worker was estimated as 1×10^{-5}, which is within the acceptable risk range established by current USEPA guidelines. For the proposed future industrial land use, the total estimated cancer risks for the site worker and construction/utility/maintenance worker were 3×10^{-5} and 7×10^{-7}, respectively. These results are within the acceptable USEPA specified range.

For the current land use, the total HI for the civilian landscape worker was estimated to be 0.07. For the proposed future industrial land use, the total HIs for the site worker and construction/utility/maintenance worker were 0.2 and 0.07, respectively for SS-005. These results are below the acceptable USEPA upper limit of 1.

6.2 Ecological Risk Assessment

A four-step process is utilized for assessing site-related ecological risks for a reasonable maximum exposure scenario: *Problem Formulation* - a qualitative evaluation of contaminant release, migration, and fate; identification of CPCs, ecological receptors, exposure pathways, and known ecological effects of the contaminants; and selection of endpoints for further study. *Exposure Assessment* - a quantitative evaluation of contaminant release, migration, and fate; characterization of exposure pathways and receptors; and measurement of the estimation of exposure point concentration. *Ecological Effects Assessment* - literature reviews, field studies, and toxicity tests, linking contaminant concentrations to effects on ecological receptors. *Risk Characterization* - a measurement of estimation of current adverse effects.

Sites SS-005, SS-006, and SS-017 (the Building 2774 Site) were combined for the ecological assessment due to their proximity to each other and their limited areal extent. A screening level ecological risk assessment was performed to assess the potential impact of exposure to contaminated surface soil on terrestrial organisms. The species evaluated for the site were the white-footed mouse, short-tailed shrew, and American robin. In addition, the terrestrial vegetation at the SS-005 site was evaluated. The results of the ecological assessment are expressed as a Hazard Quotient (HQ). An HQ of greater than or equal to 1.0 indicates potential for adverse health effects to ecological receptors.

Due to the large extent of paving, buildings, and structures at SS-005, a very limited habitat exists on site (less than 1/10 acre). The balance of the site is an open area of mowed grass which is unsuitable for mice, shrews, and robins to nest.

Ecological risk calculations for an assumed scenario of resident receptors indicated that contaminants in the surface soil at the three sites present a possible risk to wildlife. This scenario estimated potential adverse health risks based on the receptors nesting and feeding exclusively at SS-005, which is probably not realistic. HQs for arsenic, lead, and barium were calculated to be between 1 and 17. HQs for other chemicals were calculated to be less than 1.0. The scenario used for this ecological risk assessment was very conservative, including the assumption that nesting of the birds was possible without proper terrestrial vegetation at SS-005 and that feeding would occur only within SS-005, when range areas for the birds are far in excess of the available feeding areas. The ecological risk assessment concludes that, based on the limited habitat available at SS-005 and the low probability that wildlife would utilize site SS-005 exclusively, wildlife exposure to the CPCs poses very little risk.

7.0 THE DESCRIPTION OF THE REMEDY

The USAF has selected institutional controls as the remedy for the SS-005 soil operable unit. The institutional controls will consist of deed/lease restrictions prohibiting residential development on the site and restrictions of groundwater use. There will also be five-year reviews of the selected remedy in accordance with Section 121(c) of CERCLA.

7.1 Basis

The results of the RI indicate that there are no significant human health risks associated with the soil at SS-005, given its current use and expected use as an industrial/aviation, support facility. However, groundwater contaminants (aluminum, iron, and manganese) were detected at levels above regulatory standards at SS-005 and the site lies downgradient from the FT-002 site, a known significant source of groundwater contamination. Although TCE concentrations in site SS-005 groundwater are below regulatory standards, it appears that the leading edge of the FT-002 groundwater contaminant plume may have begun to migrate beneath site SS-005. Continued migration of the FT-002 plume could result in an increase in the concentrations of TCE and other FT-002 contaminants in groundwater underneath the site over time. Migration of contaminants from FT-002 will be monitored as part of the Fire Training Area/Industrial Area Groundwater Operable Unit (FTA/IA GOU).

Ecological risks are possible to terrestrial wildlife from chemicals detected in surface soil. However, due to the current land use of the area and because the area of exposed soil is limited (less than 1/10 acre), wildlife exposure to contaminants in the soil is expected to be limited.

7.2 The Selected Remedy

Because no evaluation of human health risk posed by site soils was conducted for a residential development scenario and because contaminants, although not attributable to the site, were detected in groundwater beneath the site at concentrations exceeding regulatory standards, the following actions are included in the remedy:

- Restrictions will be imposed to limit development of the site to non-residential use.
- Prohibition of the installation of any wells for drinking water or any other purposes which could result in the use of the underlying groundwater.

An evaluation of the above institutional controls, which will be implemented through lease and deed restrictions, will be undertaken as part of the five-year review of the remedy. The area that will be subject to institutional controls is shown on Figure 8.

Groundwater remedial actions, including monitoring, will be specified in the preferred alternative for the FTA/IA GOU. The area covered by the FTA/IA GOU includes site SS-005.

8.0 STATUTORY DETERMINATIONS

The remedial action selected for implementation at SS-005 is consistent with CERCLA and, to the extent practicable, the NCP. The selected remedy is protective of human health and the environment, attains ARARs, and is cost effective. The selected remedy uses permanent solutions and alternative treatment technologies to the maximum extent practicable for this site. However, it does not satisfy the statutory

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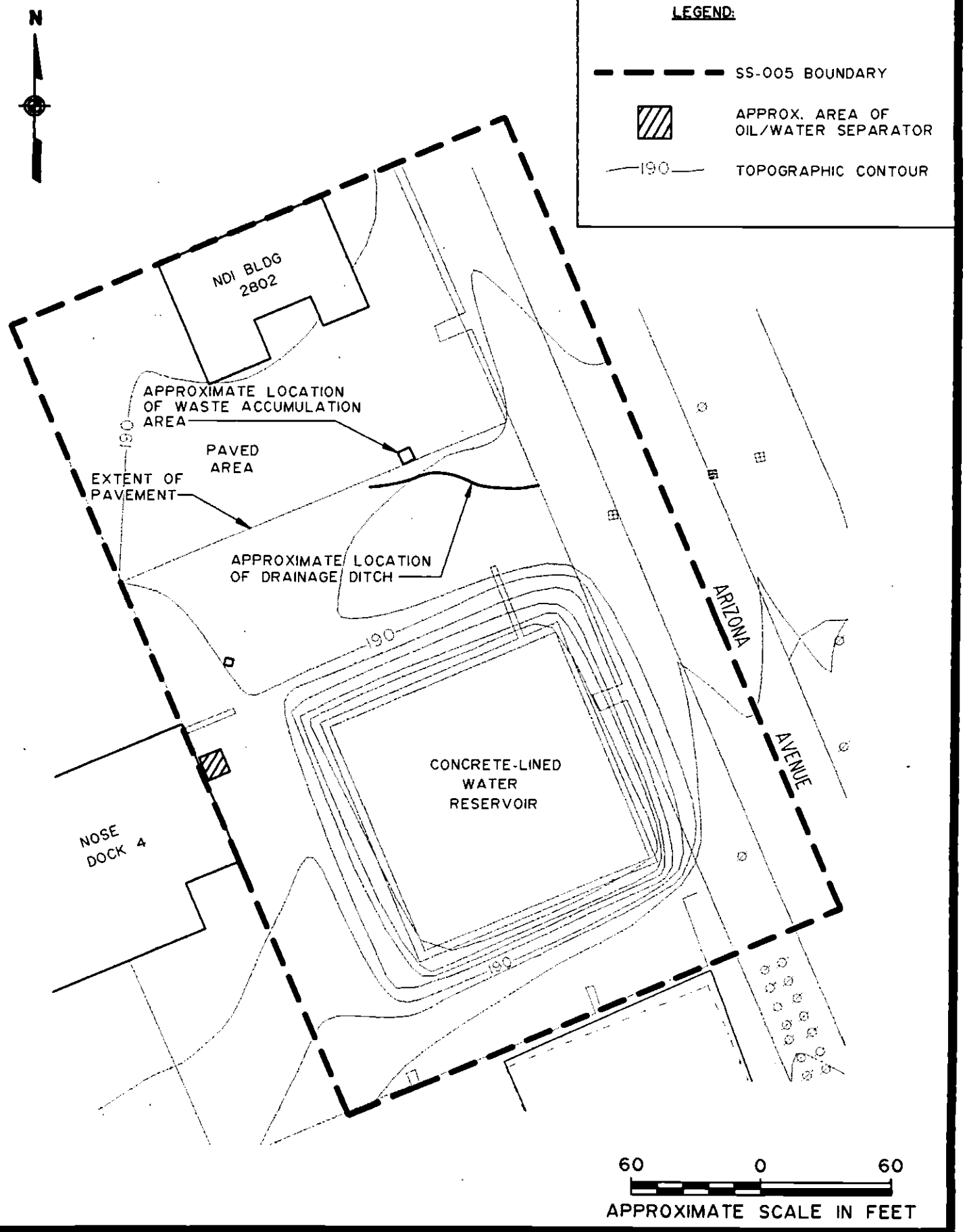

AC-12060

URS CONSULTANTS, INC.

PLATTSBURGH A.F.B.
BOUNDARY FOR RESTRICTIONS OF SITE DEVELOPMENT & POTABLE GW USE

FIGURE 8

preference for treatment which permanently and significantly reduces the mobility, toxicity, or volume of hazardous substances as a principal element.

8.1 The Selected Remedy is Protective of Human Health and the Environment

The remedy at SS-005 will permanently reduce the potential future risk posed to human health and the environment through institutional controls (i.e., restrictions imposed to limit the future development of the site and prohibit the use of groundwater). These controls, as well as five-year reviews of the selected remedy, will effectively eliminate the potential risks posed by site soils.

8.2 The Selected Remedy Attains ARARs

The remedy will comply with all applicable or relevant and appropriate chemical-, action-, and location-specific requirements (ARARs). Federal and state ARARs are presented below.

Chemical-specific

Not applicable.

Action-specific

Not applicable

Location-specific

- *National Environmental Policy Act of 1969 (NEPA) (40 CFR 1501)* - The Department of the Air Force revised their protocols to update its process for compliance with NEPA. The revision provides policy and guidance for consideration of environmental matters in the Air Force decision-making process.

8.3 Other Criteria, Advisories, or Guidance to be Considered for This Remedial Action

NYSDEC soil TBCs (*TAGM #4046*) will not be met since treatment of the site soils is not included in the alternative. However, TBCs are guidance rather than promulgated standards and the remedy adequately protects human health and the environment.

8.4 Cost-Effectiveness

The selected remedy is cost-effective.

8.5 Utilization of Permanent Solutions and Alternative Treatment Technologies (or Resource Recovery Technologies) to the Maximum Extent Practicable

The selected remedy uses permanent solutions and alternative treatment technologies to the extent practicable for this site.

8.6 The Selected Remedy Does Not Satisfy the Preference for Treatment Which Permanently and Significantly Reduces the Toxicity, Mobility, or Volume of the Hazardous Substances as a Principal Element

Treatment of the soils is considered impractical as risks to human health and the environment are within acceptable levels under the current and planned future land use scenarios. Consequently, the remedy does not satisfy the statutory preference for treatment as a principle element of remediation.

9.0 DOCUMENTATION OF NO SIGNIFICANT CHANGES

Plattsburgh AFB presented a Proposed Plan for the preferred alternative for SS-005 in February 1998 that consisted of institutional controls. The selected remedy includes:

- Deed/lease restrictions limiting development of the site to non-residential use
- Deed/lease prohibition of the installation of wells for use of the underlying groundwater

The selected remedy does not differ from the preferred alternative presented in the Proposed Plan.

10.0 STATE ROLE

The NYSDEC, on behalf of the State of New York, has reviewed the various alternatives and has indicated its support for the selected remedy. It also has reviewed the RI and Proposed Plan to determine if the selected remedy complies with applicable or relevant and appropriate New York State environmental laws and regulations. The NYSDEC concurs with the selected remedy for the SS-005. A copy of the declaration of concurrence is attached as Appendix C.

REFERENCES

E.C. Jordan, Co. 1989. *Installation Restoration Program, Final Site Inspection Report, Plattsburgh Air Force Base, Plattsburgh, New York.*

Malcolm Pirnie, Inc. 1996. Revised Draft Final, *Remedial Investigation Report, Attachment I Sites (Sites SS-005, SS-006, SS-017, and SS-018), Plattsburgh Air Force Base, New York.*

New York State Department of Environmental Conservation (NYSDEC). 1993. *Ambient Water Quality Standards and Guidance Values,* TOGS 1.1.1. Albany: Division of Water.

_____. 1994. *Determination of Soil Cleanup Objectives and Cleanup Levels,* TAGM #4046. Albany: Bureau of Hazardous Waste Remediation.

Plattsburgh Airbase Redevelopment Corporation (PARC). 1995. *Comprehensive Reuse Plan for Plattsburgh Air Force Base.* 15 September (subject to revision).

Tetra Tech. 1995. *Final Environmental Impact Statement, Disposal and Reuse of Plattsburgh Air Force Base, New York.* Prepared for the Plattsburgh Airbase Redevelopment Corporation.

URS Consultants, Inc. (URS). 1995. *Background Surface Soil and Groundwater Survey for Plattsburgh Air Force Base* (Draft).

U.S. Environmental Protection Agency (USEPA). 1989a. *Guidance on Preparing Superfund Decision Documents: the Proposed Plan, the Record of Decision, Explanation of Significant Differences, the Record of Decision Amendment,* Interim Final, July. Cincinnati, OH: USEPA.

_____. 1989b. *Risk Assessment Guidance of Superfund, Vol I: Human Health Evaluation Manual (Part A),* Interim Final (EPA/540/1-89/002). Cincinnati, OH: Office of Emergency and Remedial Response.

_____. 1989c. *Risk Assessment Guidance for Superfund. Vol II. Environmental Evaluation Manual,* (EPA/540/1-89/001). Cincinnati, OH: Office of Emergency and Remedial Response.

_____. 1991a. *Summary Report on Issues in Ecological Risk Assessment,* (EPA/625/3-91-018), Risk Assessment Forum. Cincinnati, OH: USEPA.

_____. 1991b. *Ecological Assessment of Superfund Sites: an Overview, ECO Update,* Vol. 1, No. 2, Publication 934.0-05I. Cincinnati, OH: USEPA.

GLOSSARY

Administrative Record: A file established and maintained in compliance with Section 113(K) of CERCLA, consisting of information upon which the lead agency bases its final decisions on the selection of remedial method(s) for a Superfund site. The Administrative Record is available to the public.

Applicable or Relevant and Appropriate Requirements (ARARs): ARARs include any state or federal statute or regulation that pertains to protection of public health and the environmental in addressing certain site conditions or using a particular remedial technology at a Superfund site. A state law to preserve wetland areas is an example of an ARAR. USEPA must consider whether a remedial alternative meets ARARs as part of the process for selecting a remedial alternative for a Superfund site.

Carcinogenic: Exposure to a particular level of a potential carcinogen may produce cancer.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act requires federal agencies to investigate and remediate abandoned or uncontrolled hazardous waste sites.

Ecological Receptors: Fauna or flora in a given area that could be affected by contaminants in surface soils, surface water, and/or sediment.

Groundwater: Water found beneath the earth's surface that fills pores within materials such as sand, soil, gravel, and cracks in bedrock, and often serves as a source of drinking water.

Inorganic Compounds: A class of naturally occurring compounds that includes metals, cyanide, nitrates, sulfates, chlorides, carbonate, bicarbonate, and other oxide complexes.

Installation Restoration Program (IRP): The U.S. Air Force subcomponent of the Defense Environment Restoration Program (DERP) that specifically deals with investigating and remediating sites associated with suspected releases of toxic and hazardous materials from past activities. The DERP was established to clean up hazardous waste disposal and spill sites at Department of Defense facilities nationwide.

Monitoring: Ongoing collection of information about the environment that helps gauge the effectiveness of a cleanup action. Information gathering may include groundwater well sampling, surface water sampling, soil sampling, air sampling, and physical inspections.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The NCP provides the organization structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. The NCP is required under CERCLA and the Clean Water Act, and the USEPA has been delegated the responsibility for preparing and implementing the NCP. The NCP is applicable to response actions taken pursuant to the authorities under CERCLA and the Clean Water Act.

National Priorities List: The USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program.

Natural Attenuation: Processes by which contaminant levels are reduced in nature. Contaminants in soil or groundwater are reduced by aerobic (oxygen-using) bacteria, other biological activity, volatilization, and dilution/dispersion.

Noncarcinogenic: Exposure to a particular level of a potential noncarcinogen may produce adverse health effects.

Organic Compounds: Any chemical compounds built on the carbon atom, i.e., methane, propane, phenol, etc.

Polynuclear Aromatic Hydrocarbons (PAHs): A chemical compound consisting of carbon and hydrogen and containing two or more fused benzene rings. They are a group of highly reactive organic compounds found in motor oil and common components of creosotes. Many are carcinogenic.

Petroleum Hydrocarbons (PHCs): The mixture of hydrocarbons and small amounts of other substances that make up petroleum. Hydrocarbons are chemical compounds consisting of carbon and hydrogen, and are found in gasoline, naphtha, and other products produced by refining processes.

Polychlorinated Biphenyl (PCB): A compound that formerly was used as a lubricant and transformer coolant.

Proposed Plan: A public document that solicits public input on a recommended remedial alternative to be used at a National Priorities List (NPL) site. The Proposed Plan is based on information and technical analysis generated during the RI/FS. The recommended remedial action could be modified or changed based on public comments and community concerns.

Record of Decision (ROD): A public document that explains the remedial alternative to be used at a National Priorities List (NPL) site. The ROD is based on information and technical analysis generated during the Remedial Investigation, and on consideration of the public comments and community concerns received on the Proposed Plan. The ROD includes a Responsiveness Summary of public comments.

Remedial Action: A long-term action that stops or substantially reduces a release or threat of a release of hazardous substances that is serious but not an immediate threat to human health or the environment.

Remedial Alternatives: Options evaluated to address the source and/or migration of contaminants to meet health-based or ecology-based remediation goals.

Remedial Investigation (RI): The Remedial Investigation determines the nature, extent, and composition of contamination at a hazardous waste site and directs the types of remedial options that are developed in the Feasibility Study.

Semivolatile Organic Compound (SVOCs) : Organic constituents which are generally insoluble in water and are not readily transported in groundwater.

Source: Area at a hazardous waste site from which contamination originates.

Superfund: The trust fund, created by CERCLA out of special taxes, used to investigate and clean up abandoned or uncontrolled hazardous waste sites. Out of this fund the USEPA either: (1) pays for site remediation when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work or (2) takes legal action to force parties responsible for site contamination to clean up the site or pay back the federal government for the cost of the remediation. Federal facilities are not eligible for Superfund monies.

Technical and Administrative Guidance Memorandum (TAGM): TAGM #4046 issued by NYSDEC Bureau of Hazardous Waste Remediation establishes chemical-specific soil cleanup objectives in the vadose zone. The document is entitled *Determination of Soil Cleanup Objectives and Cleanup Levels* (NYSDEC 1994).

Terrestrial Wildlife: Animals living on land (e.g., reptiles, small mammals, small birds, predatory mammals, predatory birds).

To Be Considered (TBCs): Federal and state policies, advisories, and other non-promulgated health and environment criteria, including numerical guidance values, that are not legally binding. TBCs are used for the protection of public health and the environment if no specific ARARs for a chemical or other site conditions exist, or if ARARs are not deemed sufficiently protective.

Volatile Organic Compounds (VOCs): Organic compounds that have a high propensity to volatilize or to change from a liquid to a gas form.

TAB

Appendix A

Transcript Of Public Meetings For SS-005

STATE OF NEW YORK

AIR FORCE BASE CONVERSION AGENCY

PUBLIC MEETING BRIEFING
FOR
THE PROPOSED PLANS FOR SITES
SS-005, NON-DESTRUCTIVE INSPECTION FACILITY,
AND
SS-006, AEROSPACE GROUND EQUIPMENT FACILITY

taken on Thursday, February 26, 1998
at 7:00 p.m. at the Old Courthouse
Corner of Margaret and Court Streets
Plattsburgh, New York

APPEARANCES:

MICHAEL SOREL, BRAC Environmental Coordinator

BRUCE PRZYBYL, Project Manager, URS Greiner, Inc.

COURT REPORTERS ASSOCIATES
117 Bank Street, Burlington, VT 05401
(802) 862-4593

THURSDAY, FEBRUARY 26, 1998; 7:00 P.M.

MR. SOREL: Okay. Why don't we go ahead and get started? This is a public meeting for the proposed plans for Sites SS-005, the Non-destructive Inspection Facility, and SS-006, Aerospace Ground Equipment Facility. I'd like to begin the public meeting for these two proposed sites.

For those that don't know me, I am Mike Sorel, the BRAC Environmental Coordinator working for the Air Force Base Conversion Agency at Plattsburgh. I will be presiding over this meeting, the main purpose of which is to allow the public opportunity to comment on the Air Force's actions for these sites.

Assisting me with tonight's presentation is Bruce Przybyl, the project manager at Plattsburgh for URS Greiner, Incorporated. We are here to provide answers to technical questions you may have about the remedial alternatives being considered by the Air Force.

Also with us this evening is Bob Morse with the USEPA and Jim Quinn with New York State DEC.

Tonight's agenda will consist of a summary of

data gathered at the sites and a description of the preferred remedial actions. After that, we will move to the most important part of this meeting -- the part where you provide your comments on the remedial actions.

First, however, I need to take care of several administrative details. As you can see, everything being said is being taken down word-for-word by a professional court reporter. The transcript will become part of the administrative records for these sites.

We would like everybody to complete the sign-in sheet at the door. We will use the sheet to review our mailing list for the sites.

At the conclusion of the presentation we will open the floor to comments and questions. If you have a prepared statement you may read it out loud or turn it in without reading it. In any case, your comments will become part of the record.

We have cards at the front desk for your use for written comments. If you turn in any written comments, please write your name and address on them.

If you later decide to make a comment or add to something you said here, you may send additional

comments to us at this address. We will accept comments until March 18, 1998. I will show this address slide again at the end of the meeting.

The final point is our primary purpose tonight is to listen to you. We want to hear your comments on any issues you are concerned about, and we will try to answer any questions you may have. We want you to be satisfied that the action we take will properly and fully address the problems at the site.

Now I'd like to turn the meeting over to Bruce Przybyl.

MR. PRZYBYL: Thank you, Mike. Good evening. I'd like to talk to you today about the Air Force's recommended alternatives for remedial action for two Installation Restoration Program Sites at the Plattsburgh Air Force Base. The actions at these sites are specific to soil operable units. The sites are SS-005, the Non-Destructive Inspection Facility and SS-006, the Aerospace Ground Equipment Facility.

The recommended alternative for both of these sites is institutional action. The sites are located very close to one another along Arizona Avenue in an area that is designated for industrial use or aviation support. The sites are located

here: This is Connecticut Avenue, Connecticut Road, Arizona is along in here. This is the flight line, this is the runway, this is Lake Champlain.

Because they are so close and have a similar scope of environmental impact these two sites have followed a similar regulatory path.

Action began at both of these sites in 1987 when the site inspection was conducted at each site. Each investigation consisted of a records search, a soil organic vapor survey, and a few surface soil samples. Because some low level organic contaminants were detected at the sites, remedial investigations were initiated in 1992. At SS-005, remedial investigation activities consisted of 48 surface and subsurface soil samples and the installation and sampling of three groundwater monitoring wells. At SS-006, 17 soil samples and one sediment sample were taken and three wells were installed and sampled.

Because of their close proximity, the data from these two sites was combined for analysis under one common human health risk assessment. Data from sites 005, 006 and 017 were combined into a common ecological risk assessment.

It's important to note that the Air Force has

worked with New York State and the United States Environmental Protection Agency in the each step in the process. These agencies provided input to the site investigations, remedial investigations and risk assessments.

The state and EPA have also concurred in principle regarding the remedy for Sites 005 and 006 as outlined in the proposed plan which is available to the public at the Feinburg Library. The Air Force will use this public meeting and the thirty-day public comment period to solicit comments from the community.

Is this clear? This figure depicts Site SS-005. The Non-destructive Inspection Facility was used for the x-ray inspection of aircraft parts. The investigation at this site focused on two areas of concern, including a drainage swale located adjacent to the former waste accumulation area, that is in here. The accumulation area handled cleaning solvents and photographic development chemicals from the NDI. And the second area was a former oil water/separator which is located right here. Three wells were installed at the site; one is located here, another here, another one, the third one is there at that location.

Some polycyclic aromatic hydrocarbons, chemicals created from the incomplete burning of fossil fuels, metals and two volatiles were detected above New York State soil guidance which were methylene chloride and xylene. The highest concentrations were noted at the southeastern end of the drainage swale. That is located right here. All chemicals detected in groundwater were below groundwater standards except aluminum, iron and magnesium. These metals were not highly concentrated in the soil at SS-005, so it appears that the site is not a source of groundwater contamination. Some trace level organics such as trichloroethene were detected in groundwater but not in soil, indicating contamination may be entering the site from upgradient areas, and I'll touch on that again later.

This figure depicts Site SS-006. This area, the Aerospace Ground Equipment Facility was used for maintenance and repair of flightline power carts, and that is this building right here. Precision tools utilized in the maintenance of aircraft were used in the adjacent building, Building 2801 right there.

The main area of concern at this site is a

drainage swale located between the two buildings right in this area here. This swale accumulated runoff from a waste accumulation point located adjacent to the swale right here and also from paved areas where fuel and chemicals were handled and stored. These include the waste accumulation storage shed which would be right here which was decontaminated in 1997, fueling pumps over here which were removed under the State Spill Response Program, a satellite accumulation point located adjacent to 2801 right there, and oil/water separator holding tanks which were ultimately removed under the state's program and those are located here.

Two small JP-4 spills are documented to have occurred on the pavement south of 2815 right here.

In the soil samples taken no chemicals were detected above New York State guidance except for zinc in one sample.

Chemicals were detected in groundwater, most notably trichloroethene, but they were not found in soil at the site. This indicates that groundwater contamination may be entering the site from upgradient as with SS-005.

This map depicts the groundwater flow pattern in

the central portion of the base. Recently the Air Force has completed a modeling effort describing the current contamination moving from the FT-002 site and predicting its future impact on downgradient areas.

The study revealed that contaminants, most notably TCE, are moving from FT-002 towards Sites SS-005 and SS-006. Here is the FT-002 site and here is a slope path from the northern portion of the FT-002 site headed directly toward Site SS-005 and I'd say Site SS-006 is right on the northern edge of the plume that receives a little more sporadic influence from the FT-002 site. These sites are being affected currently and the model predicts that the concentrations of the contaminants are expected to increase slightly in the future.

Risk to human health from site contaminants in soil was assessed given three scenarios. The current use scenario assumed exposure to site soils by a landscape worker. Future use was broken into two phases: A construction phase under which workers are exposed to excavating soil, and an industrial use phase under which industrial workers are exposed to site soils and are drinking groundwater from the site.

In all scenarios the non-cancer hazard indices and cancer risks were calculated to be within acceptable limits. The hazard indices being noted here are all less than one which is the upper acceptable limit. The cancer risks noted here are all less than ten to the minus four which again is the upper acceptable limit.

In addition, the ecological risk assessment indicated that no terrestrial organisms are threatened by site contaminates.

And now I will talk about the specifics of the selected remedy. The proposed remedial action at both sites consists of the same identical elements and these are:

Restrictions will be imposed on the development of the site of the facilities that support industrial non-residential use. Because of the risk assessment evaluated scenario is consistent with a planned industrial use of the sites, the Air Force will restrict development of sites to industrial use.

Second, restrictions will be imposed to prohibit the installation of any wells for drinking water or any other purposes which could result in the use of the underlying groundwater. Although the

contamination groundwater in Sites 005 and 006 is not currently a problem, contaminates from Site FT-002 may increase in concentration beneath Sites 005 and 006, and therefore I believe the Air Force is prudent to institute groundwater restrictions.

Last, an evaluation of the institutional restrictions which will be implemented through lease and deed agreements will be undertaken as part of the five-year review of the remedy to insure that human health and the environment is continuing to be protected. And that is the end of the discussion.

MR. SOREL: Okay. At this point I'd like to open up the meeting for comments or questions. Since everything being said here tonight is being taken down, please state your name for the record before you make your statement. Any questions from anybody?

Okay. Since we have no questions if you should later decide to make additional comments on the proposed action alternatives please mail them to this address by March 18th, 1998. Also I would like to add that the proposed plans are available for review at the information repository located in the Special Collections at the Feinburg Library at SUNY Plattsburgh.

That concludes this meeting. Thank you for coming.

(The hearing concluded at 7:20 p.m.)

C E R T I F I C A T E

I, Carol A. Boone, Notary Public and Court Reporter, hereby certify that the foregoing pages, numbered 2 through 12 inclusive, are a true and accurate transcription to the best of my ability of the public hearing in the matter of Plattsburgh Air Force Base Conversion, taken before me on the 26th day of February, 1998, at Old Court House, Corner of Margaret Street and Court Street, Plattsburgh, New York, in this matter now pending.

I further certify that I am not related to counsel, counsel's law firm, nor any party to the case in this matter, nor do I have any interest in the outcome of the case.

Carol A. Boone

Carol A. Boone, Court Reporter

TAB

Appendix B

Responsiveness Summary

DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

March 18, 1998

MEMO FOR RECORD

SUBJECT: Responsiveness Summary: Public Comment Period for Proposed Plans at IRP Site SS-005, Non-Destructive Inspection Facility, and IRP Site SS-006, IRP Site SS-006, Aerospace Ground Equipment Facility

A. OVERVIEW

IRP Site SS-005: The Non-Destructive Inspection Facility (NDI) is located in the eastern portion of the base, within the industrial area. The facility was used for the non-destructive x-ray inspection of aircraft parts.

A waste accumulation area formerly was located at SS-005. Materials used and stored at this facility included PD-680 cleaning solvent, engine oil, 1,1,1-tricholorethane, developer, dye penetrant fluid, remover, and photographic fixer solution. The fixer solution was treated by a silver recovery unit before disposal.

A Site Inspection (SI) was conducted at SS-005 in 1987. A Remedial Investigation (RI) was performed from October 1992 to February 1993. Findings showed that chemical contaminants are present at relatively low levels in soil at SS-005. These chemicals do not pose a significant threat to human or ecological health under current and planned future non-residential land use scenarios.

The USAF has selected institutional controls as the preferred alternative for the SS-005 soil operable unit. The institutional controls will consist of deed restrictions prohibiting residential development on the site and restrictions of groundwater use. There will be a five-year review of the selected remedy in accordance with Section 121(c) of CERCLA.

IRP Site SS-006: The Aerospace Ground Equipment Facility (AGE) is located in Building 2815 in the east-central portion of Plattsburgh AFB, approximately 600 feet east of the flightline. Building 2801, the Weapons Systems Management and Maintenance Facility, is included in this site.

Constructed in 1980, the AGE building (Bldg. 2815) was utilized for the maintenance and repair of ground power carts that provided electrical and pneumatic power to parked aircraft. Building 2801 was constructed in 1956 and housed the Precision Measurement Equipment Laboratory (PMEL), where aircraft maintenance tools were calibrated. Other flightline-related offices were also housed in Building 2801.

SS-006 is also the location of one of the hazardous waste accumulation points on the base that accepted hazardous waste from satellite accumulation points at the AGE and at Building 2801 from 1989 until the base closed in 1995. There were no reported spills in this area. In addition, two 5,000-gallon underground storage tanks (USTs), reportedly used to store diesel fuel, formerly were located west of the AGE, and a former oil/water separator was located near the southern wall of the AGE. A former 550-gallon underground holding tank was associated with this separator. Former filling pumps were also located at the AGE.

A Site Inspection (SI) was conducted at SS-006 in 1987. A Remedial Investigation (RI) was performed from October 1992 to February 1995. Findings showed that chemical contaminants are present at relatively low levels in soil at SS-006. These chemicals do not pose a significant threat to human or ecological health under current and planned future non-residential land use scenarios.

The USAF has selected institutional controls as the preferred alternative for the SS-006 soil operable unit. The institutional controls will consist of deed restrictions prohibiting residential development on the site and restrictions of groundwater use. There will be a five-year review of the selected remedy in accordance with Section 121(c) of CERCLA.

B. PUBLIC MEETING & PUBLIC COMMENT PERIOD

A Public Meeting was held on the proposed plans for SS-005 and SS-006 on February 26, 1998, at 7:00 p.m. It was held at the Old Court House in the City of Plattsburgh, County of Clinton, NY. A prepared statement was read by Mr. Michael D. Sorel, PE, the BRAC Environmental Coordinator for the Air Force Base Conversion Agency (AFBCA). Mr. Bruce Przybyl of URS Greiner, Inc., detailed the proposed plans for the audience. The floor was then opened to the public for questions and comments. Concluding the meeting was a statement by Mr. Sorel that additional comments could be sent to the Air Force. As advertised in the Plattsburgh *Press-Republican*, the public comment period ran from February 17, 1998, to March 18, 1998. The Public Meeting was recorded by a court reporter, Ms. Carol Boone of Court Reporters Associates, Burlington, VT.

C. SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND AGENCY RESPONSES

A memorandum dated March 12, 1998, was received from Mr. John Huru, the AFBCA-DA Plattsburgh Site Manager. Mr. Huru felt "that the word 'industrial' should be deleted from the action regarding development of the site. Restrictions should be imposed to prohibit residential use of the site only. Any other use restriction is unjustified and would unduly impact the local redevelopment agency."

The USAF will change the wording from, "industrial, non-residential use" to "non-residential use."

From the time of the Public Meeting until the deadline of March 18, 1998, no further questions or comments were received by the Air Force regarding the proposed plans for SS-005 and SS-006.

MICHAEL D. SOREL, PE
BRAC Environmental Coordinator

Attachment:
Memorandum from AFBCA-DA/Plattsuburgh

1154 53 file

DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

March 12, 1998

MEMORANDUM FOR AFBCA/DA PLATTSBURGH
ATTN: MR. MICHAEL D. SOREL, PE
BRAC Environmental Coordinator
426 US Oval Suite 2200
Plattsburgh NY 12903

FROM: AFBCA/DA Plattsburgh
426 US Oval Suite 2200
Plattsburgh NY 12903

SUBJECT: Proposed Plans, SS-005 and SS-006

I have reviewed the Proposed Plans for Sites SS-005 and SS-006 and have a comment regarding the preferred alternative. I feel that the word "industrial" should be deleted from the action regarding development of the site. Restrictions should be imposed to prohibit residential use of the site only. Any other use restriction is unjustified and would unduly impact the local redevelopment agency.

JOHN D. HURU, PE
Site Manager

TAB

Appendix C

NYSDEC Concurrence Letter

Bob Wing → Bob Morse

1154 55

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-4349 FAX: (518)

John P. Cahill
Commissioner

March 31, 1998

Mr. Richard Caspe
Director
Emergency & Remedial Response Division
U.S. Environmental Protection Agency
Region II
290 Broadway
New York, NY 10007-1866

Dear Mr. Caspe:

Re: Records of Decision
SS-005 and SS-006
Plattsburgh Air Force Base - ID No. 510003

In response to the Records of Decision (RODs) for SS-005 (Non-Destructive Inspection Facility) and SS-006 (Aerospace Ground Equipment Facility) submitted and signed by Assistant Secretary Rodney A. Coleman of the United States Air Force, I wish to concur with the remedial action plans as put forth in the RODs. The remedy at each of these sites will be institutional controls including:

- Lease/deed restrictions imposed to limit development of the site to non-residential use;

- Prohibition on the installation of any wells for the use of site groundwater.

I understand that the adequacy of this remedy to protect human health and the environment will be reviewed during the five-year site reviews.

Sincerely,

Michael J. O'Toole, Jr.
Director
Division of Environmental Remediation

c: R. Coleman, USAF
M. Sorel, USAF
R. Wing/R. Morse, USEPA-Region II
G. Anders Carlson, NYSDOH

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